

STRUCTURE SEARCH

=> d his 176

(FILE 'AGRICOLA, BIOSIS, EMBASE' ENTERED AT 17:46:29 ON 01 OCT 2009)

SAV TEMP L75 KAU467MULT/A

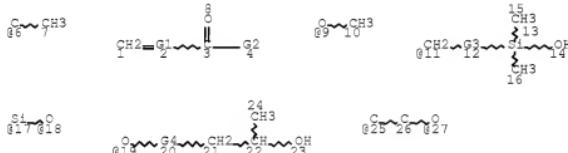
FILE 'HCAPLUS' ENTERED AT 17:48:56 ON 01 OCT 2009
L76 38 S L66 OR L67

=> d que 176

L2 24 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (117428-22-5/
BI OR 131860-33-8/BI OR 153719-23-4/BI OR 155569-91-8/B
I OR 1897-45-6/BI OR 478813-84-2/BI OR 478813-85-3/BI
OR 478813-86-4/BI OR 478813-89-7/BI OR 478813-93-3/BI
OR 478813-94-4/BI OR 478813-97-7/BI OR 478813-99-9/BI
OR 478932-53-5/BI OR 709672-75-3/BI OR 709672-76-4/BI
OR 709672-77-5/BI OR 709672-78-6/BI OR 709673-62-1/BI
OR 709673-65-4/BI OR 709673-68-7/BI OR 709673-70-1/BI
OR 709673-72-3/BI OR 71751-41-2/BI)

L4

STR



VAR G1=CH/6

VAR G2=9/11/19

REP G3=(10-11) 17-11 18-13

REP G4=(4-20) 25-19 27-21

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

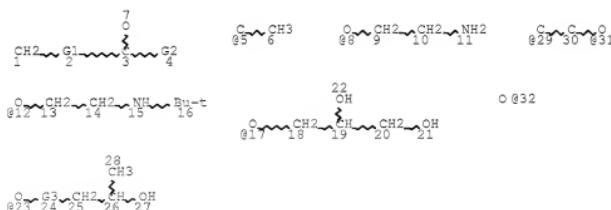
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

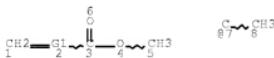
L6 STR



VAR G1=CH/5
 VAR G2=32/8/12/17/23
 REP G3=(4-20) 29-23 31-25
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 7
 CONNECT IS E1 RC AT 32
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 32

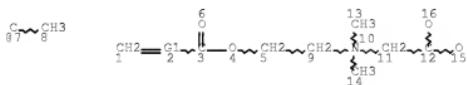
STEREO ATTRIBUTES: NONE
 L8 STR 2043
 L11 92835 SEA FILE=REGISTRY SSS FUL L4 AND L8
 L14 40884 SEA FILE=REGISTRY SUB=L11 SSS FUL L6
 L20 STR



VAR G1=CH/7
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
 L21 STR



VAR G1=CH/7
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 15
 CONNECT IS E1 RC AT 16
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
 L22 STR



VAR G1=CH/7

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

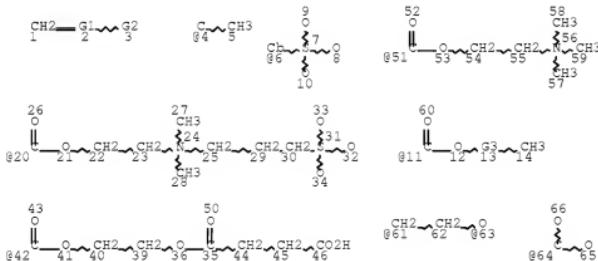
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L23

STR



VAR G1=CH/4

VAR G2=6/51/20/11/42/64

REP G3=(5-20) 61-12 63-14

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 8

CONNECT IS E1 RC AT 9

CONNECT IS E1 RC AT 10

CONNECT IS E1 RC AT 32

CONNECT IS E1 RC AT 33

CONNECT IS E1 RC AT 34

CONNECT IS E3 RC AT 64

CONNECT IS E1 RC AT 65

CONNECT IS E1 RC AT 66

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 6

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E6 C AT 6

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 56

STEREO ATTRIBUTES: NONE

L25 37140 SEA FILE=REGISTRY SUB=L14 SSS FUL L23

L26 7 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L25 AND L2

L30 199 SEA FILE=REGISTRY SUB=L11 SSS FUL L20 AND L22

L31 5 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L30

L37 30 SEA FILE=REGISTRY SUB=L11 SSS FUL L21

L43 64 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L37

L45 312637 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON AGROCHEM?/SC, S X

L46 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L43 AND L45

L47 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L31

L48 113 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L30

L49 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L26

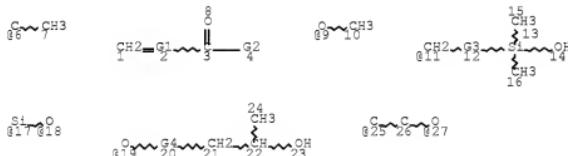
10/537,467-310163-EIC SEARCH

L50 37641 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L25
 L51 4 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L48 AND L45
 L52 284 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L50 AND L45
 L53 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L49 AND L45
 L54 4 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L46 OR L47)
 OR L51 OR L53
 L55 QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERS? OR COL
 LOID? OR EMULS? OR MICROEMULS? OR SLURR?
 L56 121 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L52 AND L55
 L57 QUE SPE=ON ABB=ON PLU=ON AQUEOUS OR (WATER OR H2O)(
 2A) SOLUBLE
 L58 49 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L56 AND L57
 L59 52 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L54 OR L58
 L60 QUE SPE=ON ABB=ON PLU=ON PY=<2003 NOT P/DT
 L61 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L59 AND L60
 L62 QUE SPE=ON ABB=ON PLU=ON (PY=<2003 OR PRY=<2003 OR
 AX=<2003 OR MY=<2003 OR REVIEW/DT) AND P/DT
 L63 34 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L58 AND L62
 L64 35 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L63 OR L61
 L65 1 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L64 AND L54
 L66 4 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L65 OR L54
 L67 34 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L64 NOT L66
 L76 38 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L66 OR L67

> d que 175

L2 24 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (117428-22-5/
 BI OR 131860-33-8/B1 OR 153719-23-4/B1 OR 155569-91-8/B
 I OR 1897-45-6/B1 OR 478813-84-2/B1 OR 478813-85-3/B1
 OR 478813-86-4/B1 OR 478813-89-7/B1 OR 478813-93-3/B1
 OR 478813-94-4/B1 OR 478813-97-7/B1 OR 478813-99-9/B1
 OR 478932-53-5/B1 OR 709672-75-3/B1 OR 709672-76-4/B1
 OR 709672-77-5/B1 OR 709672-78-6/B1 OR 709673-62-1/B1
 OR 709673-65-4/B1 OR 709673-68-7/B1 OR 709673-70-1/B1
 OR 709673-72-3/B1 OR 71751-41-2/B1)

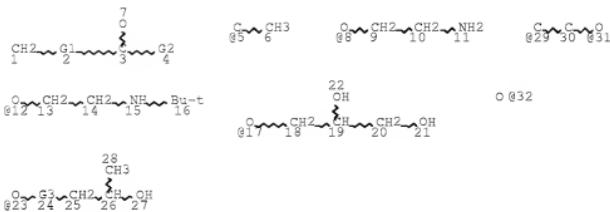
L4 STR



VAR G1=CH/6
 VAR G2=9/11/19
 REP G3=(10-11) 17-11 18-13
 REP G4=(4-20) 25-19 27-21
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE
 L6 STR



```

VAR G1=CH/5
VAR G2=32/8/12/17/23
REP G3=(4-20) 29-23 31-25
NODE ATTRIBUTES:
CONNECT IS E1 RC AT    7
CONNECT IS E1 RC AT   32
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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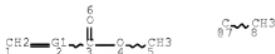
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  32

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STEREO ATTRIBUTES: NONE
L8           SCR 2043
L11          92835 SEA FILE=REGISTRY SSS FUL L4 AND L8
L14          40884 SEA FILE=REGISTRY SUB=L11 SSS FUL L6
L15          10 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L14
L20          STR

```



```

VAR G1=CH/7
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

```

```

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  8

```

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STEREO ATTRIBUTES: NONE
L21           STR

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Chemical structure for L21: CH₂-G₁-O-C(=O)-CH₂-CH₂-CH₂-OH.

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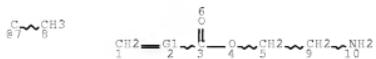
VAR G1=CH/7
NODE ATTRIBUTES:

```

CONNECT IS E1 RC AT 15
 CONNECT IS E1 RC AT 16
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 16

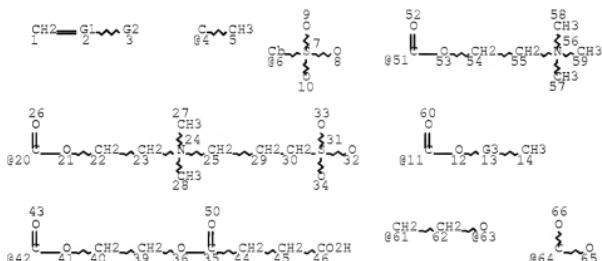
STEREO ATTRIBUTES: NONE
 L22 STR



VAR G1=CH/7
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L23 STR



VAR G1=CH/4
 VAR G2=6/51/20/11/42/64
 REP G3=(5-20) 61-12 63-14
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 8
 CONNECT IS E1 RC AT 9
 CONNECT IS E1 RC AT 10
 CONNECT IS E1 RC AT 32
 CONNECT IS E1 RC AT 33
 CONNECT IS E1 RC AT 34
 CONNECT IS E3 RC AT 64
 CONNECT IS E1 RC AT 65
 CONNECT IS E1 RC AT 66
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 6
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS E6 C AT 6

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 56

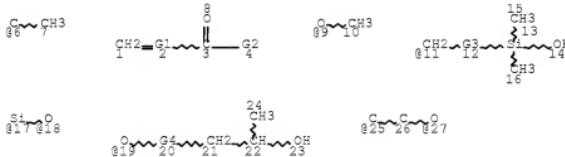
STEREO ATTRIBUTES: NONE

```
L25      37140 SEA FILE=REGISTRY SUB=L14 SSS FUL L23
L30      199 SEA FILE=REGISTRY SUB=L11 SSS FUL L20 AND L22
L31      5 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L30
L37      30 SEA FILE=REGISTRY SUB=L11 SSS FUL L21
L39      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L37
L40      11 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L37 AND L25
L55      QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERST? OR COL
          LOID? OR EMULS? OR MICROEMULS? OR SLURR?
L60      QUE SPE=ON ABB=ON PLU=ON PY=<2003 NOT P/DT
L62      QUE SPE=ON ABB=ON PLU=ON (PY=<2003 OR PRY=<2003 OR
          AY=<2003 OR MY=<2003 OR REVIEW/DT) AND P/DT
L68      229 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L39 OR L40
          OR L37 OR L31 OR L30
L69      37267 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L68 OR L25
          OR L15
L70      18 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L69 AND
          (AGRICOLA/LC OR BIOSIS/LC OR EMBASE/LC)
L71      161 SEA L70
L72      24 SEA L71 AND L55
L73      10 SEA L72 AND L60
L74      0 SEA L72 AND L62
L75      10 SEA L73 OR L74
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```
L2      24 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (117428-22-5/
          BI OR 131860-33-8/BI OR 153719-23-4/BI OR 155569-91-8/B
          I OR 1897-45-6/BI OR 478813-84-2/BI OR 478813-85-3/BI
          OR 478813-86-4/BI OR 478813-89-7/BI OR 478813-93-3/BI
          OR 478813-94-4/BI OR 478813-97-7/BI OR 478813-99-9/B
          OR 478932-53-5/BI OR 709672-75-3/BI OR 709672-76-4/B
          OR 709672-77-5/BI OR 709672-78-6/BI OR 709673-62-1/B
          OR 709673-65-4/BI OR 709673-68-7/BI OR 709673-70-1/B
          OR 709673-72-3/BI OR 71751-41-2/B)
```

L4 STR



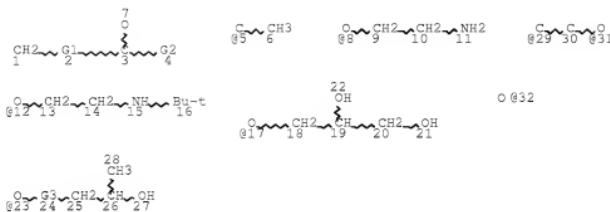
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VAR G1=CH/6
VAR G2=9/11/19
REP G3=(10-11) 17-11 18-13
REP G4=(4-20) 25-19 27-21
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L6

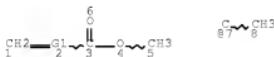
STR



VAR G1=CH/5
 VAR G2=32/8/12/17/23
 REP G3=(4-20) 29-23 31-25
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 7
 CONNECT IS E1 RC AT 32
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 32

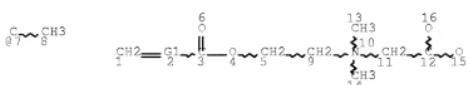
STEREO ATTRIBUTES: NONE
 L8 SCR 2043
 L11 92835 SEA FILE=REGISTRY SSS FUL L4 AND L8
 L14 40884 SEA FILE=REGISTRY SUB=L11 SSS FUL L6
 L15 10 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L14
 L20 STR



VAR G1=CH/7
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
 L21 STR



VAR G1=CH/7

NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 15
 CONNECT IS E1 RC AT 16
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 16

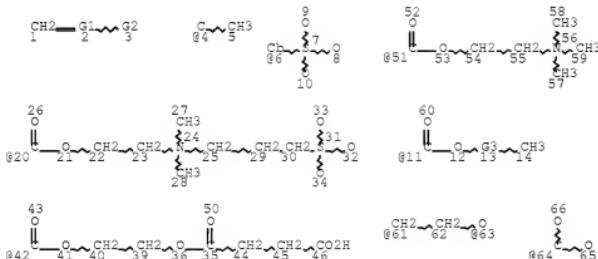
STEREO ATTRIBUTES: NONE
 L22 STR



VAR G1=CH/7
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L23 STR



VAR G1=CH/4
 VAR G2=6/51/20/11/42/64
 REP G3=(5-20) 61-12 63-14
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 8
 CONNECT IS E1 RC AT 9
 CONNECT IS E1 RC AT 10
 CONNECT IS E1 RC AT 32
 CONNECT IS E1 RC AT 33
 CONNECT IS E1 RC AT 34
 CONNECT IS E3 RC AT 64
 CONNECT IS E1 RC AT 65
 CONNECT IS E1 RC AT 66
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 6
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS E6 C AT 6

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 56

STEREO ATTRIBUTES: NONE

L25 37140 SEA FILE=REGISTRY SUB=L14 SSS FUL L23
 L30 199 SEA FILE=REGISTRY SUB=L11 SSS FUL L20 AND L22
 L31 5 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L30
 L37 30 SEA FILE=REGISTRY SUB=L11 SSS FUL L21
 L39 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L37
 L40 11 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L37 AND L25
 L55 QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERST? OR COL
 LOID? OR EMULS? OR MICROEMULS? OR SLURR?
 L60 QUE SPE=ON ABB=ON PLU=ON PY=<2003 NOT P/DT
 L62 QUE SPE=ON ABB=ON PLU=ON (PY=<2003 OR PRY=<2003 OR
 AY=<2003 OR MY=<2003 OR REVIEW/DT) AND P/DT
 L68 229 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L39 OR L40
 OR L37 OR L31 OR L30
 L69 37267 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L68 OR L25
 OR L15
 L70 18 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L69 AND
 (AGRICOLA/LC OR BIOSIS/LC OR EMBASE/LC)
 L71 161 SEA L70
 L72 24 SEA L71 AND L55
 L73 10 SEA L72 AND L60
 L74 0 SEA L72 AND L62
 L75 10 SEA L73 OR L74

=> dup rem 176 175
 FILE 'HCAPLUS' ENTERED AT 17:50:21 ON 01 OCT 2009
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 17:50:21 ON 01 OCT 2009
 Copyright (c) 2009 The Thomson Corporation
 PROCESSING COMPLETED FOR L76
 PROCESSING COMPLETED FOR L75
 L77 48 DUP REM L76 L75 (0 DUPLICATES REMOVED)
 ANSWERS '1-38' FROM FILE HCAPLUS
 ANSWERS '39-48' FROM FILE BIOSIS

STRUCTURE SEARCH RESULTS

=> d 177 1-38 ibib ed abs hitstr hitind

L77 ANSWER 1 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:470205 HCPLUS Full-text
 DOCUMENT NUMBER: 143:2615
 TITLE: Fungicidal aqueous
 suspension concentrate
 INVENTOR(S): Kang, Kyung-Goo; Kim, Tae-Young; Kim, Dal-Soo;
 Chun, Sam-Jae
 PATENT ASSIGNEE(S): Lg Life Sciences Ltd., S. Korea; Joe, Goon-Ho
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2005048707	A1	20050602	WO 2004-KR2979	2004 1117

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
 ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
 KE, KG, KP, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG,
 MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT,
 RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
 CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
 LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG,
 CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

KR 2005047699	A	20050523	KR 2003-81464	2003 1118
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EP 1686853	A1	20060809	EP 2004-819020	2004 1117
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
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 PRIORITY APPLN. INFO.: KR 2003-81464 A

2003 1118

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WO 2004-KR2979	W	2004 1117
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ED Entered STN: 02 Jun 2005
 AB The invention relates to a stable aqueous suspension concentrate composition which
 comprises one or more fungicides and water-soluble or water-
 dispersible polyoxyalkylene alkyl ether, which does not form gel in the preparation
 process, and does not form cake during storage. The stable suspension concentrate is
 characterized in using appropriate water-soluble solvent to act as anti-gelling and
 anti-caking agent and an appropriate dispersant.
 IT 125770-20-9, Tersperse 2500
 RL: MOA (Modifier or additive use); USES (Uses)
 (dispersant; fungicidal aqueous

suspension concentrate)
 RN 125770-20-9 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with methyl
 2-methyl-2-propenoate and oxirane, graft (CA INDEX NAME)

CM 1

CRN 80-62-6
CMF C5 H8 O2

CM 2

CRN 79-41-4
CMF C4 H6 O2

CM 3

CRN 75-21-8
CMF C2 H4 O

IC ICM A01N025-04
 CC 5-2 (Agrochemical Bioregulators)
 ST fungicide aq suspension conc
 IT Fungicides
 Pesticide formulations
 (fungicidal aqueous suspension concentrate)
 IT 9004-95-9, Konion CA 12
 RL: MOA (Modifier or additive use); USES (Uses)
 (Konion CA 12, anti-gelling and anti-caking agent; fungicidal
 aqueous suspension concentrate)
 IT 9005-00-9, Konion SA 10
 RL: MOA (Modifier or additive use); USES (Uses)
 (Konion SA 10, anti-gelling and anti-caking agent; fungicidal
 aqueous suspension concentrate)
 IT 57-55-6, Propylene glycol, uses 107-21-1, Ethylene glycol, uses
 111-46-6, DiEthylene glycol, uses 9004-98-2, Konion OA 12
 25265-71-8, Dipropylene glycol
 RL: MOA (Modifier or additive use); USES (Uses)
 (anti-gelling and anti-caking agent; fungicidal aqueous
 suspension concentrate)
 IT 125770-20-9, Tersperse 2500
 RL: MOA (Modifier or additive use); USES (Uses)
 (dispersant; fungicidal aqueous
 suspension concentrate)

10/537,467-310163-EIC SEARCH

IT 1897-45-6, Chlorothalonil 25606-41-1, Propamocarb hydrochloride 36734-19-7, Iprodione 68694-11-1, Triflumizole 70630-17-0, Metalaxy1-M 107534-96-3, Tebuconazole 110235-47-7, Mepanipyrim 110488-70-5, Dimethomorph 119446-68-3, Difenconazole 120116-88-3, Cyazofamid 125116-23-6, Metconazole 131807-57-3, Famoxadone 131860-33-8, Azoxystrobin 136426-54-5, Fluquinconazole 140923-17-7, Iprovalicarb 141517-21-7, Trifloxystrobin 143390-89-0, Kreosoxim-methyl 156052-68-5, Zoxamide 162650-77-3, Ethaboxan
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (fungicidal aqueous suspension concentrate)
 IT 577-11-7, Empimin OP 70
 RL: MOA (Modifier or additive use); USES (Uses) (wetting agent; fungicidal aqueous suspension concentrate)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 2 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:513445 HCPLUS Full-text
 DOCUMENT NUMBER: 1411:66712
 TITLE: Particulate agrochemical suspensions with polymeric stabilizers
 INVENTOR(S): Heming, Alexander Mark; Shirley, Ian Malcolm; Winn, Peter David
 PATENT ASSIGNEE(S): Syngenta Limited, UK
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052099	A2	20040624	WO 2003-GB5291	2003 1205 ---
WO 2004052099	A3	20040916		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MN, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GU, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2508553	A1	20040624	CA 2003-2508553	2003 1205 ---
AU 2003292383	A1	20040630	AU 2003-292383	2003 1205 ---
AU 2003292383	B2	20071220		
EP 1569512	A2	20050907	EP 2003-767960	2003 1205 ---

10/537,467-310163-EIC SEARCH

EP 1569512	B1	20070228		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016838	A	20051018	BR 2003-16838	
				2003 1205
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CN 1744815	A	20060308	CN 2003-80109342	
				2003 1205
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AT 354955	T	20060315	AT 2003-767960	
				2003 1205
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JP 2006509028	T	20060316	JP 2004-558778	
				2003 1205
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NZ 540079	A	20061222	NZ 2003-540079	
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ES 2279176	T3	20070816	ES 2003-767960	
				2003 1205
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IL 168970	A	20090504	IL 2003-168970	
				2003 1205
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ZA 2005004014	A	20060426	ZA 2005-4014	
				2005 0518
<--				
IN 2005DN02222	A	20090327	IN 2005-DN2222	
				2005 0525
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MX 2005005865	A	20050829	MX 2005-5865	
				2005 0601
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NO 2005002711	A	20050627	NO 2005-2711	
				2005 0606
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US 20060116290	A1	20060601	US 2005-537467	
				2005 1208
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PRIORITY APPLN. INFO.:			GB 2002-28537	A
				2002 1206
<--				
			WO 2003-GB5291	W
				2003 1205
<--				

ED Entered STN: 25 Jun 2004

AB The stability of particulate suspension comprising an aqueous phase containing a suspended agrochem. solid insol. in the aqueous phase, and containing substantially no miscible organic solvent, is enhanced by (1) forming a polymeric stabilizer with a hydrophilic moiety and a hydrophobic moiety and (2) reacting this stabilizer with z1 substance dissolved or suspended in the aqueous phase. The stabilizers (e.g. reactive

10/537,467-310163-EIC SEARCH

surfactants synthesized by atomic transfer radical polymerization) are formed by polymerizing a plurality of vinylic monomers (not exclusively vinylic esters or their hydrolyzed products), at least some of which contain functional groups capable of undergoing crosslinking reactions, with functional groups of substance(s) in the aqueous phase. The ratio is <1 part by weight of the polymeric stabilizer prior to crosslinking per 5 parts of suspended agrochem. Thus, a fluid suspension concentrate with little or no foaming and particle size of 1.61 μm was prepared by milling picoxystrobin 20% weight/weight in water and Me methacrylate-mono-2-(methacryloyloxy)ethyl succinate diblock copolymer 5% by weight relative to the fungicide with zirconia beads in a shaker mill for 30 min.

IT 478813-86-4 478813-89-7
 478813-93-3 478813-94-4 478813-97-7
 478813-99-9 709672-75-3 709672-76-4
 709672-77-5 709673-62-1

RL: AGE (Agricultural use); BIOL (Biological study); USES (Uses)
 (particulate pesticide suspensions stabilized with
 reactive polymeric surfactants)

RN 478813-86-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
 methyl 2-methyl-2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and sodium 2-methyl-2-propenoate, graft (9CI) (CA
 INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 2

CRN 5536-61-8
 CMF C4 H6 O2 . Na



● Na

CM 3

CRN 868-77-9
 CMF C6 H10 O3



CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 478813-89-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with methyl 2-methyl-2-propenoate and
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H

● HCl

CM 3

CRN 80-62-6
CMF C5 H8 O2

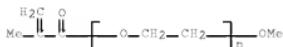
RN 478813-93-3 HCPLUS

10/537,467-310163-EIC SEARCH

CN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS



CM 2

CRN 20882-04-6
 CMF C₁₀ H₁₄ O₆



CM 3

CRN 2420-94-2
 CMF C₆ H₁₁ N O₂ . Cl H



● HCl

CM 4

CRN 80-62-6
 CMF C₅ H₈ O₂



RN 478813-94-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride, polymer with methyl 2-methyl-2-propenoate,

10/537,467-310163-EIC SEARCH

α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and sodium 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C₂H₄O)_nC₅H₈O₂
 CCI PMS



CM 2

CRN 5536-61-8
 CMF C₄H₆O₂.Na



● Na

CM 3

CRN 2420-94-2
 CMF C₆H₁₁N O₂.Cl H



● HCl

CM 4

CRN 80-62-6
 CMF C₅H₈O₂



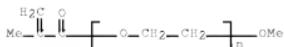
RN 478813-97-7 HCPLUS

10/537,467-310163-EIC SEARCH

CN Butanedioic acid, mono[2-[{(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C₂ H₄ O)_n C₅ H₈ O₂
CCI PMS



CM 2

CRN 20882-04-6
CMF C₁₀ H₁₄ O₆



CM 3

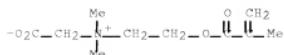
CRN 80-62-6
CMF C₅ H₈ O₂



RN 478813-99-9 HCPLUS
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

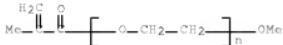
CM 1

CRN 62723-61-9
CMF C₁₀ H₁₇ N O₄



CM 2

CRN 26915-72-0
 CMF (C₂H₄O)_n C₅H₈O₂
 CCI PMS



CM 3

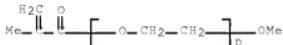
CRN 80-62-6
 CMF C₅H₈O₂



RN 709672-75-3 HCPLUS
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, iodide, polymer with 2-[(1,1-dimethylethyl)amino]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9Cl) (CA INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C₂H₄O)_n C₅H₈O₂
 CCI PMS



CM 2

CRN 26536-87-8
 CMF C₉H₁₈N O₂.I

● I⁻

CM 3

CRN 3775-90-4
CMF C10 H19 N O2

CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 709672-76-4 HCPLUS
 CN Ethanaminium, N,N,N-trimethyl-2-[((2-methyl-1-oxo-2-propenyl)oxy)-, iodide, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 26536-87-8
CMF C9 H18 N O2 . I

● I-

CM 3

10/537,467-310163-EIC SEARCH

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H



● HCl

CM 4

CRN 80-62-6
CMF C5 H8 O2



RN 709672-77-5 HCPLUS
CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
polymer with methyl 2-methyl-2-propenoate, diblock (9CI) (CA
INDEX NAME)

CM 1

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H



● HCl

CM 2

CRN 80-62-6
CMF C5 H8 O2



RN 709673-62-1 HCPLUS
CN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]
ester, polymer with methyl 2-methyl-2-propenoate, diblock (9CI)
(CA INDEX NAME)

CM 1

CRN 20882-04-6
CMF C10 H14 O6

CM 2

CRN 80-62-6
CMF C5 H8 O2

IC ICM A01N025-00
 CC 5-6 (Agrochemical Bioregulators)
 Section cross-reference(s): 37, 46
 ST agrochem suspension stabilizer polymer surfactant
 IT Acaricides
 Fungicides
 Insecticides
 Surfactants
 (particulate pesticide suspensions stabilized with
 reactive polymeric surfactants)
 IT Pesticide formulations
 (suspensions; particulate pesticide
 suspensions stabilized with reactive polymeric
 surfactants)
 IT 1897-45-6, Chlorothalonil 71751-41-2, Abamectin 117428-22-5,
 Picoxystrobin 131860-33-8, Azoxystrobin 153719-23-4,
 Thiamethoxam 155569-91-8, Enamectin benzoate 478813-84-2
 478813-85-3 478813-86-4 478813-89-7
 478813-93-3 478813-94-4 478813-97-7
 478813-99-9 478932-53-5 709672-75-3
 709672-76-4 709672-77-5 709672-78-6
 709673-62-1 709673-65-4 709673-68-7 709673-70-1
 709673-72-3
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (particulate pesticide suspensions stabilized with
 reactive polymeric surfactants)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L77 ANSWER 3 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:964247 HCAPLUS Full-text
 DOCUMENT NUMBER: 138:39741
 TITLE: Use of reactive polymeric surfactants in the
 formation of emulsions
 INVENTOR(S): Heming, Alexander Mark; Mulqueen, Patrick
 Joseph; Scher, Herbert Benson; Shirley, Ian
 Malcolm
 PATENT ASSIGNEE(S): Syngenta Limited, UK

10/537,467-310163-EIC SEARCH

SOURCE:

PCT Int. Appl., 60 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT:

English

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002100525	A2	20021219	WO 2002-GB2744	2002 0610
WO 2002100525	A3	20030731		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, ML, MM, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2447759	A1	20021219	CA 2002-2447759	2002 0610
AU 2002314315	A1	20021223	AU 2002-314315	2002 0610
AU 2002314315 NZ 529669	B2	20061221 20031219	NZ 2002-529669	2002 0610
EP 1401562	A2	20040331	EP 2002-740885	2002 0610
EP 1401562	B1	20081008		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002010302	A	20040713	BR 2002-10302	2002 0610
CN 1541136	A	20041027	CN 2002-815689	2002 0610
CN 100415354 JP 2004537610	C T	20080903 20041216	JP 2003-503338	2002 0610
IL 159062	A	20070704	IL 2002-159062	2002 0610
AT 410222	T	20081015	AT 2002-740885	2002 0610
ES 2311057	T3	20090201	ES 2002-740885	2002 0610
ZA 2003009057	A	20040917	ZA 2003-9057	2003 1120
IN 2003MN01063	A	20050429	IN 2003-MN1063	2003 1120
MX 2003011379	A	20040405	MX 2003-11379	

10/537,467-310163-EIC SEARCH

US 20040197357	A1	20041007	US 2004-480405		2003 1209
					2004 0527
US 7199185	B2	20070403	GB 2001-14197	A	
PRIORITY APPLN. INFO.:					2001 0611
			WO 2002-GB2744	W	
					2002 0610

ED Entered STN: 20 Dec 2002

AB The emulsions comprise a liquid continuous phase, a liquid discontinuous phase, and a polymer surfactant having hydrophilic and hydrophobic components as stabilizer; upon interfacial polymerization, microcapsules are formed that contain an active agent, e.g., agrochem. active agents. The monomers are selected from vinyl, (meth)acrylates, alkylene glycols, and contain reactive groups, e.g., sulfonate, carboxy, carboxybetaine, quaternary ammonium, epoxide, carbodiimide, aziridine, etc. The surfactants are random graft polymers or block copolymers in which the hydrophobic unit includes a hydrophilic crosslinking unit which reacts with a wall forming ingredient in a microencapsulation process, or an ingredient in the disperse phase of an emulsion. A reactive polymer surfactant was prepared by ATRP [atom transfer radical polymerization] of Me methacrylate, 2-hydroxyethyl methacrylate, 2-(trimethylammonium)ethyl methacrylate iodide, and mono-methoxy-poly(ethylene glycol)-mono methacrylate using ethyl-2-bromoisoobutyrate as initiator, CuCl catalyst and N-propyl-2-pyridylmethanamine catalyst ligand, at 25-90° for 3-24 h.

IT 709673-62-1P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(diblock; preparation and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

RN 709673-62-1 HCAPLUS

CN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with methyl 2-methyl-2-propenoate, diblock (9CI)
(CA INDEX NAME)

CM 1

CRN 20882-04-6

CMF C10 H14 O6



CM 2

CRN 80-62-6

CMF C5 H8 O2



IT 478814-18-5P 478814-19-6P

478814-20-9P

RL: AGR (Agricultural use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study);
 PREP (Preparation); USES (Uses)
 (microcapsules; preparation of reactive polymeric surfactant
 emulsifier encapsulants for agrochem. agents)

RN 478814-18-5 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with 1,3-diisocyanatomethylbenzene, 2-(dimethylamino)ethyl
 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and polymethylenepolyphenylene isocyanate, compd. with
 iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4

CMF C H3 I

H3C—I

CM 2

CRN 478814-17-4

CMF (C9 H6 N2 O2 . C8 H15 N O2 . C6 H11 N O2 . C5 H8 O2 . (C2 H4
 O)n C5 H8 O2 . Cl H . Unspecified)x

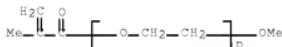
CCI PMS

CM 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

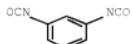


CM 4

CRN 26471-62-5

CMF C9 H6 N2 O2

CCI IDS



D1—Me

CM 5

CRN 9016-87-9
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 6

CRN 2867-47-2
 CMF C8 H15 N O2



CM 7

CRN 2420-94-2
 CMF C6 H11 N O2 . Cl H



● HCl

CM 8

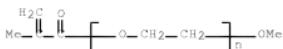
CRN 80-62-6
 CMF C5 H8 O2



RN 478814-19-6 HCPLUS
 CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxyethyl]-3-sulfo-, inner salt, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, 1,3-diisocyanatomethylbenzene, methyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME)

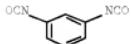
CM 1

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 2

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS



D1-Me

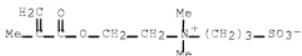
CM 3

CRN 9016-87-9
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 3637-26-1
 CMF C11 H21 N O5 S



CM 5

CRN 2420-94-2
 CMF C6 H11 N O2 . Cl H



● HCl

CM 6

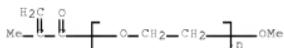
CRN 80-62-6
 CMF C5 H8 O2



RN 478814-20-9 HCPLUS
 CRN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, 1,3-diisocyanatomethylbenzene, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and polymethylenepolyphenylene isocyanate (9CI) (CA INDEX NAME)

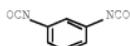
CM 1

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 2

CRN 26471-62-5
 CMF C9 H6 N2 O2
 CCI IDS



D1—Me

CM 3

CRN 20882-04-6
 CMF C10 H14 O6



CM 4

CRN 9016-87-9
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 2420-94-2
 CMF C6 H11 N O2 . Cl H



● HCl

CM 6

CRN 80-62-6
 CMF C5 H8 O2



IT 478813-86-4P 478813-89-7P
 478813-91-1P 478813-92-2P
 478813-93-3P 478813-94-4P
 478813-95-5P 478813-97-7P
 478813-99-9P

RL IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

RN 478813-86-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and sodium 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 2

CRN 5536-61-8
CMF C4 H6 O2 . Na

● Na

CM 3

CRN 868-77-9
CMF C6 H10 O3

CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 478813-89-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with methyl 2-methyl-2-propenoate and
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 2420-94-2
 CMF C6 H11 N O2 . Cl H



● HCl

CM 3

CRN 80-62-6
 CMF C5 H8 O2



RN 478813-91-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, methyl
 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)-
 ω -methoxy poly(oxy-1,2-ethanediyl), graft, compd. with
 iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4
 CMF C H3 I



CM 2

CRN 478813-90-0
 CMF (C8 H15 N O2 . C6 H11 N O2 . C5 H8 O2 . (C2 H4 O)n C5 H8 O2 .
 Cl H)x
 CCI PMS

CM 3

CRN 26915-72-0
 CMF (C2 H4 O)n C5 H8 O2
 CCI PMS



CM 4

CRN 2867-47-2
CMF C8 H15 N O2

CM 5

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H

● HCl

CM 6

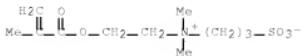
CRN 80-62-6
CMF C5 H8 O2

RN 478813-92-2 HCPLUS
 CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxyethyl]-3-sulfo-, inner salt, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 3637-26-1
CMF C11 H21 N O5 S

CM 3

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H

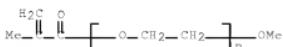
● HCl

CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 478813-93-3 HCPLUS
 CN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 20882-04-6
CMF C10 H14 O6

CM 3

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H

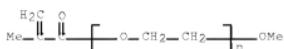
● HCl

CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 478813-94-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with methyl 2-methyl-2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-
 ethanediyl) and sodium 2-methyl-2-propenoate, graft (9CI) (CA
 INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 5536-61-8
 CMF C₄ H₆ O₂ . Na



● Na

CM 3

CRN 2420-94-2
 CMF C₆ H₁₁ N O₂ . Cl H



● HCl

CM 4

CRN 80-62-6
 CMF C₅ H₈ O₂



RN 478813-95-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride,
 polymer with 4-ethenylbenzenesulfonic acid, methyl
 2-methoxypoly(ether-1,2-ethanediyl), graft (9CI) (CA INDEX
 NAME)

CM 1

CRN 26915-72-0
 CMF (C₂ H₄ O)_n C₅ H₈ O₂
 CCI PMS

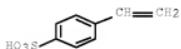


CM 2

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H

● HCl

CM 3

CRN 98-70-4
CMF C8 H8 O3 S

CM 4

CRN 80-62-6
CMF C5 H8 O2

RN 478813-97-7 HCAPLUS
 CN Butanedioic acid, mono[2-[{(2-methyl-1-oxo-2-propenyl)oxy}ethyl]ester, polymer with methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 2

CRN 20882-04-6
CMF C10 H14 O6



CM 3

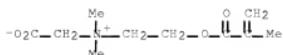
CRN 80-62-6
CMF C5 H8 O2



RN 478813-99-9 HCPLUS
CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[$(2$ -methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with methyl 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

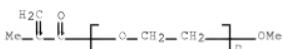
CM 1

CRN 62723-61-9
CMF C10 H17 N O4



CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS



CM 3

CRN 80-62-6
CMF C5 H8 O2



IT 478814-02-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (preparation of crosslinked surfactant emulsifiers at air/water interface to prepare stable emulsions of internal liquid phases)

RN 478814-02-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride, polymer with methyl 2-methyl-2-propenoate,
 α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), polymethylenepolyphenylene isocyanate and sodium 2-methyl-2-propenoate (SCI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS



CM 2

CRN 9016-87-9

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 5536-61-8

CMF C4 H6 O2 . Na



● Na

CM 4

CRN 2420-94-2

CMF C6 H11 N O2 . Cl H



● HCl

CM 5

CRN 80-62-6
CMF C5 H8 O2IT 478814-03-8P 478814-06-1P
478814-08-3PRL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)RN 478814-03-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride, polymer with Desmodur N 3300, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 104559-01-5
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

CM 3

CRN 5536-61-8
CMF C4 H6 O2 . Na



● Na

CM 4

CRN 2420-94-2

CMF C6 H11 N O2 . Cl H



● HCl

CM 5

CRN 80-62-6

CMF C5 H8 O2



RN 478814-06-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride, polymer with methanedimine, methyl 2-methyl-2-propenoate, α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl) and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS



CM 2

CRN 5536-61-8

CMF C4 H6 O2 . Na



● Na

CM 3

CRN 2420-94-2
CMF C6 H11 N O2 . Cl H



● HCl

CM 4

CRN 151-51-9
CMF C H2 N2



CM 5

CRN 80-62-6
CMF C5 H8 O2



RN 478814-08-3 HCAPLUS
 CN Butanedioic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-aminoethyl 2-methyl-2-propenoate hydrochloride, methanediamine, methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

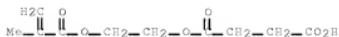
CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2
CCI PMS

10/537,467-310163-EIC SEARCH



CM 2

CRN 20882-04-6
CMF C10 H14 06



CM 3

CRN 2420-94-2
CMF C6 H11 N 02 . Cl H



HGJ

CM 4

CRN 151-51-9
CMF C H2 N2



CM 5

CRN 80-62-6
CMF C5 H8 02



IC ICM B01F017-00
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 5, 46

10/537,467-310163-EIC SEARCH

IT 119182-44-4P, 2-Hydroxyethyl methacrylate-methyl methacrylate block copolymer 478813-96-6P 709673-62-1P
709673-70-1P
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(diblock; preparation and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 478814-10-7P 478814-11-8P 478814-12-9P 478814-13-0P
478814-14-1P 478814-16-3P 478814-18-5P
478814-19-6P 478814-20-9P
RL: AGR (Agricultural use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(microcapsules; preparation of reactive polymeric surfactant emulsifiers encapsulants for agrochem. agents)

IT 478813-84-2P 478813-85-3P 478813-86-4P
478813-87-5P 478813-88-6P 478813-89-7P
478813-91-1P 478813-92-2P
478813-93-3P 478813-94-4P
478813-95-5P 478813-97-7P 478813-98-8P
478813-99-9P 478814-00-5P 478814-01-6P 478932-53-5P
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 478814-02-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of crosslinked surfactant emulsifiers at air/water interface to prepare stable emulsions of internal liquid phases)

IT 478814-03-8P 478814-04-9P 478814-05-0P
478814-06-1P 478814-07-2P 478814-08-3P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 4 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002110203 HCPLUS [Full-text](#)
DOCUMENT NUMBER: 136.70690
TITLE: Stabilization of light sensitive substances for pest control formulations
INVENTOR(S): Rose, Simon Alexander Hanson; Grey, Bryan David; Kullar, Jatinder Singh
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Water Treatments Ltd., UK
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000023	A1	20020103	WO 2001-EP6602	2001 0612

10/537 467-310163-EJC SEARCH

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W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW		
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
CA 2411579	A1	20020103	CA 2001-2411579
			2001 0612
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EP 1294230	A1	20030326	EP 2001-951575
			2001 0612
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EP 1294230	B1	20060412	
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		
HU 2003000656	A2	20030728	HU 2003-656
			2001 0612
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AT 322820	T	20060415	AT 2001-951575
			2001 0612
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CN 1251588	C	20060419	CN 2001-811845
			2001 0612
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AU 2001272464	B2	20060810	AU 2001-272464
			2001 0612
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ES 2261439	T3	20061116	ES 2001-951575
			2001 0612
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IL 153239	A	20070704	IL 2001-153239
			2001 0612
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US 20030134910	A1	20030717	US 2002-297647
			2002 1209
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MX 2002012801	A	20030514	MX 2002-12801
			2002 1219
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US 20060247323	A1	20061102	US 2006-475698
			2006 0627
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RRIORITY APPLN. INFO.:		GB 2000-15395	A
			2000 0626
<--			
		WO 2001-EP6602	W
			2001 0612
<--			

2002
1209

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ED Entered STN: 04 Jan 2002

AB An emulsion comprising an organic discontinuous phase which is distributed through a continuous aqueous phase, where the organic phase comprises a light sensitive active ingredient, and the emulsion is stabilized by a water-soluble stabilizing material in the aqueous phase, where the water-soluble stabilizing material is a water-soluble stabilizing polymer which has many hydrophilic and hydrophobic groups and is selected from partially hydrolyzed poly(vinyl acetate) and addition copolymers formed from (i) ≥ 1 ethylenically unsatd. carboxylic acid esters and (ii) ≥ 1 ethylenically unsatd. carboxylic acid or ethylenically unsatd. carboxylic acid anhydride, and where the organic phase further comprises (a) an organic solvent which is a liquid at 25° and/or (b) an organic phase stabilizing material comprises hydrophobic moieties and is a material which is more soluble in the organic phase than the aqueous phase. The composition is useful for protecting light sensitive active ingredients which would otherwise in neat form decompose on exposure to light, preferably sunlight. The light sensitive active ingredient maybe pesticide e.g. pyrethroids, herbicide or a veterinary treatment active.

IT 25035-88-5, Butyl acrylate-ethyl acrylate-methacrylic acid-methyl methacrylate copolymer

RL: POF (Polymer in formulation); USES (Uses)
(emulsion stabilized light sensitive substances for pest control formulations)

RN 25035-88-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 140-88-5
CMF C5 H8 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

IC ICM A01N025-22
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 5
 IT Pesticides
 (emulsion stabilized light sensitive substances for
 pest control formulations)
 IT Pyrethrins
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsion stabilized light sensitive substances for
 pest control formulations)
 IT 9003-20-7D, Poly(vinyl acetate), hydrolyzed 25035-88-5
 , Butyl acrylate-ethyl acrylate-methacrylic acid-methyl
 methacrylate copolymer 29860-33-1, 2-Hydroxypropyl
 methacrylate-lauryl methacrylate copolymer 76653-25-3, Isobutyl
 methacrylate-2-hydroxypropyl methacrylate copolymer 193477-25-7,
 Maleic anhydride-stearyl methacrylate-styrene copolymer
 RL: POF (Polymer in formulation); USES (Uses)
 (emulsion stabilized light sensitive substances for
 pest control formulations)
 IT 26002-80-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsion stabilized light sensitive substances for
 pest control formulations)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L77 ANSWER 5 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:1644932 HCPLUS Full-text
 DOCUMENT NUMBER: 137:186624
 TITLE: Antifogging and transparent polyolefin films
 for agricultural uses
 INVENTOR(S): Arai, Hirotaka; Yamagishi, Hiroshi
 PATENT ASSIGNEE(S): Mitsubishi Chemical MKV Co., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002238367	A	20020827	JP 2001-45676	2001 0221
PRIORITY APPLN. INFO.:			<-- JP 2001-45676	2001

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ED Entered STN: 27 Aug 2002

AB Title films contain exterior layers prepared from acrylic resin (preferably having a glass-transition temperature of 50-82°) and acrylic modified polyolefin blends. A trilayered film consecutively consisted of an antifogging interior layer [from aqueous solution containing colloidal SiO₂ and acrylic acid (I)-Et acrylate-Me methacrylate (II)-styrene copolymer], a LDPE base film, and an exterior layer (from 70% I-II-Bu acrylate-Bu methacrylate copolymer and 30% II copolymerd. resin prepared from 2-hydroxyethyl acrylate and II-modified maleated hydrogenated butadiene-styrene block copolymer) and showed good interlayer adhesion (in water at 5° over 24 h), no fusing (after soaking in water for 2 days, wrapping on a metal pipe, and drying at 65° for 1 wk), and good transparency and antifogging ability over 4 yrs.

IT 38415-32-6P, Acrylic acid-butyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer S1981-89-6P, Acrylic acid-butyl acrylate-butyl methacrylate-methyl methacrylate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (blends for exterior layer; mulch films containing antifogging interiors and exteriors prepared from acrylic resin and acrylic modified polyolefin blends)

RN 38415-32-6 HCPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

CRN 97-88-1

CMF C8 H14 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



10/537,467-310163-EIC SEARCH

CM 4

CRN 79-10-7
CMF C3 H4 O2

RN 51981-89-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl
 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid
 (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 97-88-1
CMF C8 H14 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

IT 25585-75-5P, Acrylic acid-ethyl acrylate-methyl methacrylate-styrene copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (interior layer; mulch films containing antifogging interiors and exteriors prepared from acrylic resin and acrylic modified polyolefin blends)

RN 25585-75-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5
 CMF C5 H8 O2

CM 2

CRN 100-42-5
 CMF C8 H8

CM 3

CRN 80-62-6
 CMF C5 H8 O2

CM 4

CRN 79-10-7
 CMF C3 H4 O2

IC ICM A01G009-14
 ICS A01G013-02; C08J007-04; C08L023-00
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 5
 IT 80-62-6DP, Methyl methacrylate, polymers with 2-hydroxyethyl acrylate reaction products with maleated hydrogenated butadiene-styrene block copolymer 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with maleated hydrogenated butadiene-styrene block copolymer, polymers with Me methacrylate 38415-32-6P, Acrylic acid-butyl methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 51981-89-6P, Acrylic acid-butyl acrylate-butyl methacrylate-methyl methacrylate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (blends for exterior layer; mulch films containing antifogging interiors and exteriors prepared from acrylic resin and acrylic modified polyolefin blends)
 IT 25585-75-5P, Acrylic acid-ethyl acrylate-methyl methacrylate-styrene copolymer 29717-56-4P, Acrylamide-acrylic acid-2-ethylhexyl acrylate-styrene copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (interior layer; mulch films containing antifogging interiors and exteriors prepared from acrylic resin and acrylic modified polyolefin blends)

L77 ANSWER 6 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:751970 HCAPLUS Full-text
 DOCUMENT NUMBER: 137:295796
 TITLE: Microencapsulation with polyurethanes and(or) polyureas
 INVENTOR(S): Podszun, Wolfgang; Krueger, Joachim; Probst, Joachim
 PATENT ASSIGNEE(S): Bayer AG, Germany
 SOURCE: Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10117784	A1	20021017	DE 2001-10117784	2001 0410
CA 2443682	A1	20021024	CA 2002-2443682	2002 0402
WO 2002083290	A1	20021024	WO 2002-EP3617	2002 0402

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
 MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,
 SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
 VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,
 BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
 NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,

10/537,467-310163-EIC SEARCH

ML, MR, NE, SN, TD, TG			
AU 2002244761	A1	20021028	AU 2002-244761
			2002 0402
<--			
EP 1379328	A1	20040114	EP 2002-712964
			2002 0402
<--			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
BR 2002008797	A	20040309	BR 2002-8797
			2002 0402
<--			
CN 1501837	A	20040602	CN 2002-808106
			2002 0402
<--			
JP 2004535276	T	20041125	JP 2002-581087
			2002 0402
<--			
US 20040115280	A1	20040617	US 2003-474123
			2003 1006
<--			
MX 2003009229	A	20040129	MX 2003-9229
			2003 1009
<--			
PRIORITY APPLN. INFO.:		DE 2001-10117784	A
			2001 0410
<--			
	WO 2002-EP3617		W
			2002 0402
<--			

ED Entered STN: 18 Oct 2002

AB Highly stable microcapsules are manufactured by encapsulation of solid active substances in an aqueous dispersion in which ≥ 1 polyisocyanate is reacted with ≥ 1 polyol and/or polyamine. Typical active substances are drugs, agrochems., perfumes, leucodyes, fireproofing agents, and adhesives.IT 26351-99-5P, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer, reaction products with isocyanuric- and allophanate-containing HDI-based polyisocyanates
RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)

(microencapsulation with polyurethanes and/or polyureas of active substances)

RN 26351-99-5 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

IC ICM B01J013-02
 ICS A61K009-50
 CC 38-2 (Plastics Fabrication and Uses)
 Section cross-reference(s): 5, 19, 62, 63
 IT 822-06-0DP, HDI, isocyanurate- and allophanate-containing polyisocyanate, polymers with acrylic polyols 26351-99-5DP, Acrylic acid-butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer, reaction products with isocyanurate- and allophanate-containing HDI-based polyisocyanates
 RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
 (microencapsulation with polyurethanes and(or) polyureas of active substances)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L77 ANSWER 7 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:237920 HCAPLUS [Full-text](#)

10/537,467-310163-EIC SEARCH

DOCUMENT NUMBER: 134:267872
 TITLE: Antifogging compositions and their resin films
 for agricultural uses
 INVENTOR(S): Yamagishi, Hiroshi; Arai, Hirotaka
 PATENT ASSIGNEE(S): Mitsubishi Kagaku MKV KK, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2001089751	A	20010403	JP 1999-268374	1999 0922
			<--	
JP 3988335	B2	20071010	JP 1999-268374	1999 0922
			<--	

PRORITY APPLN. INFO.:

ED Entered STN: 04 Apr 2001
 AB Title compns. comprise aqueous dispersions of hydrophobic resins (A) with glass-transition temperature (Tg) of 35-80°, aqueous polyurethane (B) compns., and colloidal sols (C) at B/A of 0.01-1:1, and C/(A + B) of 0.5-5. An aqueous composition containing Bu methacrylate-Me methacrylate copolymer (with Tg 37°) 2.0, Takelac XW 74-CO3 0.6, and colloidal SiO₂ 5 parts was coated on a polyethylene film to form a film with good antifogging after facing to a 50° water container at 20° atom. for 1 mo and 3 h at 20° water container under 10° atmospheric
 IT 25565-75-5P, Acrylic acid-ethyl acrylate-methyl methacrylate-styrene copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
 RN 25565-75-5 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5

CMF C5 H8 O2



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

- IC ICM C09K003-18
 ICS A01G009-14; A01G013-02; C08J007-04
 CC 42-13 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 ST antifogging coating acrylic resin polyurethane colloidal
 sol; agricultural film antifogging coating acrylic resin glass
 transition temp
 IT Antifogging agents
 Mulches
 Plastic films
 (antifogging agents containing acrylic resins with controlled glass
 transition temperature and polyurethanes and colloidal sols
 for mulches)
 IT Acrylic polymers, uses
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 PRP (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass
 transition temperature and polyurethanes and colloidal sols
 for mulches)
 IT Plate glass
 RL: POF (Polymer in formulation); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass
 transition temperature and polyurethanes and colloidal sols
 for mulches)
 IT Polyurethanes, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered
 material use); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass
 transition temperature and polyurethanes and colloidal sols
 for mulches)
 IT Polyesters, miscellaneous
 Polyolefins
 RL: POF (Polymer in formulation); USES (Uses)
 (films; antifogging agents containing acrylic resins with
 controlled glass transition temperature and polyurethanes and
 colloidal sols for mulches)

- IT Vinyl compounds, uses
 RL: POF (Polymer in formulation); USES (Uses)
 (polymers; films; antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
- IT 25585-75-5P, Acrylic acid-ethyl acrylate-methyl methacrylate-styrene copolymer 25608-33-7P, Butyl methacrylate-methyl methacrylate copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
- IT 280109-44-6, Takelac W 605 324742-99-6, Takelac W 6010 331764-13-7, Takelac XW 74C03 331764-14-8, Takelac WS 4000 331764-16-0, Trimethylolpropane tris(3-aziridinopropionate)-Takelac WS 4000 copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
- IT 7631-86-9, Colloidal silica, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (colloidal; antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
- IT 9002-86-2, PVC 9002-88-4, Polyethylene 9003-22-9, Vinyl acetate-vinyl chloride copolymer 9011-14-7, PMMA 25038-59-9, PET polymer, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (films; antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)
- IT 1344-28-1, Alumina, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sol; antifogging agents containing acrylic resins with controlled glass transition temperature and polyurethanes and colloidal sols for mulches)

L77 ANSWER 8 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:741834 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 133:292322
 TITLE: Aqueous dispersion
 pesticide formulations
 INVENTOR(S): Strom, Robert M.; Price, D. Claude; Lubetkin, Steven D.
 PATENT ASSIGNEE(S): Dow Agrosciences LLC, USA; Dow Chemical Company
 SOURCE: PCT Int. Appl., 15 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000060940	A1	20001019	WO 2000-US9568	2000 0410

<--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH,
 CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK,

10/537,467-310163-EIC SEARCH

LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 TZ, UA, UG, UZ, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
 SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
 TD, TG

PRIORITY APPLN. INFO.:

US 1999-128994P

P
1999
0412

<--

ED Entered STN: 20 Oct 2000

AB The bioavailability of a pesticide can be increased by formulating the pesticide as a stable aqueous dispersion with a particle mean diameter ≤ 500 nm, obtained by milling. Such a formulation has the further advantage of reducing or eliminating the need for organic solvents. The stable aqueous dispersion provides a means of preparing a one part formulation of a plurality of pesticides which would be otherwise unstable in each other's presence. Suitable surfactants are i.a. Pluronic P105, Morwet D425, Iconol TD-6, Soprophor FL, and a range of other conventional surfactants.

IT 119724-54-8, Ation 4913

RL: MOA (Modifier or additive use); USES (Uses)
 (surfactant in aqueous dispersion pesticide
 formulation)

RN 119724-54-8 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 α -methyl- ω -hydroxypoly(oxy-1,2-ethanediyl) and methyl
 2-methyl-2-propenoate, graft (CA INDEX NAME)

CM 1

CRN 9004-74-4

CMF (C₂ H₄ O)_n C H₄ O

CCI PMS



CM 2

CRN 80-62-6

CMF C₅ H₈ O₂

CM 3

CRN 79-41-4

CMF C₄ H₆ O₂

IC ICM A01N025-04
 CC 5-4 (Agrochemical Bioregulators)
 ST eq dispersion pesticide formulations
 IT Pyrethrins
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (aqueous dispersion formulation of)
 IT Pesticide formulations
 (aqueous dispersion pesticide formulation)
 IT 1912-24-9, Atrazine 126572-77-8, Strobiluron 133855-98-8,
 Epoxiconazole 168316-95-8, Spinosad 264257-62-7
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (aqueous dispersion formulation of)
 IT 9008-63-3, Morwell D425 24938-91-8, Iconol TDA-6 94896-21-6,
 Atlox 4991 98285-49-5, Empicrol LX 105362-40-1, Soprophor FL
 106392-12-5, Pluronics P105 119724-54-8, Atlox 4913
 RL: MOA (Modifier or additive use); USES (Uses)
 (surfactant in aqueous dispersion pesticide
 formulation)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE REFORMAT

L77 ANSWER 9 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:247493 HCPLUS Full-text
DOCUMENT NUMBER: 132:280579
TITLE: Sustained-release antifouling marine coatings
based on aqueous resin
emulsions
INVENTOR(S): Kawamura, Isao; Yoshihara, Ichiro; Hori,
Makoto
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
JP 2000109729	A	20000418	JP 1998-283616	
				1998
				1006
			<--	
PRIORITY APPLN. INFO.:			JP 1998-283616	
				1998
				1006
			<--	

ED Entered STN: 18 Apr 2000
AB The storage-stable coatings comprise (A) aqueous resin emulsions containing CO₂H and/or metal carboxylate groups in a resin mol., having acid value 10-300 KOH-mg/g, and prepared by emulsion polymerization and optionally (B) aqueous ≥ 2 -valent metal-carboxylic acid complexes, where equivalent number of metals in the metal carboxylate group of A (%), that of metals in B (%), that of carboxyl groups of A (Y), and that of metal carboxylate groups of B (%) satisfy $(W + X)/(Y + Z) = 0.2-4.0$. Thus, an aqueous pre-emulsion containing methacrylic acid 91.8, Et acrylate 480.0, Me methacrylate 28.2, Newcol 707SF (anionic emulsifier) 40.0, and ammonium persulfate 0.60 part was added dropwise to H₂O containing 1.2 part ammonium persulfate and aged to give a 40% polymer emulsion, 56.2 parts of which was blended with an aqueous 36% malic acid/Zn ammonium complex 16.3, Cu₂O 22.5, pigment dispersant 2.8, red Fe oxide 1.8, Aerosil 200 0.4, and

H₂O 1.8 part, applied on an anticorrosive plate, and dried to form a coating showing no adhesion of marine lives for 6 mo in the sea.

IT 116695-87-5P, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer zinc salt 263704-66-1P
263704-68-3P

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); POF (Polymer in formulation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aqueous resin emulsions containing or forming metal carboxylate groups for sustained-release antifouling marine coatings)

RN 116695-87-5 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate, zinc salt (9CI) (CA INDEX NAME)

CM 1

CRN 25133-97-5

CMF (C₅ H₈ O₂ . C₅ H₈ O₂ . C₄ H₆ O₂)x

CCI PMG

CM 2

CRN 140-88-5

CMF C₅ H₈ O₂

CM 3

CRN 80-62-6

CMF C₅ H₈ O₂

CM 4

CRN 79-41-4

CMF C₄ H₆ O₂

RN 263704-66-1 HCPLUS

CN Zinc, hydroxy(2-methyl-2-propenoato-κO)-, polymer with ethyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, zinc salt (9CI) (CA INDEX NAME)

CM 1

10/537,467-310163-EIC SEARCH

CRN 263704-65-0
 CMF (C5 H8 O2 . C5 H8 O2 . C4 H6 O3 Zn . C4 H6 O2)x
 CCI PMS

CM 2

CRN 63451-47-8
 CMF C4 H6 O3 Zn



CM 3

CRN 140-88-5
 CMF C5 H8 O2



CM 4

CRN 80-62-6
 CMF C5 H8 O2



CM 5

CRN 79-41-4
 CMF C4 H6 O2



RN 263704-68-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate,
 methyl 2-methyl-2-propenoate and zinc di-2-propenoate, zinc salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 263704-67-2
 CMF (C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2 . 1/2 Zn)x
 CCI PMS

CM 2

CRN 14643-87-9
CMF C3 H4 O2 . 1/2 Zn

● 1/2 Zn

CM 3

CRN 140-88-5
CMF C5 H8 O2

CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-41-4
CMF C4 H6 O2

IC ICM C09D005-16
 ICS C09D005-00; C09D133-02; C09D143-00; C09D171-00; C09D201-08
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 ST antifouling marine coating acrylic emulsion ag
 ; zinc malate acrylic emulsion coating antifouling
 IT Coating materials
 (antifouling, marine; aqueous resin emulsions
 containing or forming metal carboxylate groups for
 sustained-release antifouling marine coatings)

- IT Coating materials
 (emulsion, water-thinned; aqueous resin emulsions containing or forming metal carboxylate groups for sustained-release antifouling marine coatings)
- IT 79-14-1DP, Hydroxyacetic acid, zinc-ammine complexes 7440-66-6DP,
 Zinc, ammine-hydroxycarboxylic acid complexes, uses
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (aqueous resin emulsions containing or forming metal carboxylate groups for sustained-release antifouling marine coatings)
- IT 116695-87-5P, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer zinc salt 190382-13-9P, Butyl acrylate-ethyl acrylate-methacrylic acid copolymer zinc salt 263704-66-1P 263704-68-3P
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); POF (Polymer in formulation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (aqueous resin emulsions containing or forming metal carboxylate groups for sustained-release antifouling marine coatings)
- IT 1317-39-1, Cuprous oxide, uses
 RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
 (aqueous resin emulsions containing or forming metal carboxylate groups for sustained-release antifouling marine coatings)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L77 ANSWER 10 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:807730 HCPLUS Full-text
 DOCUMENT NUMBER: 1331363824
 TITLE: Production of inherently microbicidal polymer surfaces
 INVENTOR(S): Ottersbach, Peter; Sosna, Friedrich
 PATENT ASSIGNEE(S): Creavis Gesellschaft fuer Technologie und Innovation m.b.H., Germany
 SOURCE: Ger. Offen., 6 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19921898	A1	20001116	DE 1999-19921898	1999 0512
WO 2000069925	A1	20001123	WO 2000-EP2783	2000 0330
EP 1183282	A1	20020306	EP 2000-922570	2000 0330
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.: DE 1999-19921898 A 1999

0512

WO 2000-EP2783

W

2000
0330

ED Entered STIN: 16 Nov 2000

AB The surfaces of plastics are rendered microbicidal by graft-polymerization of aliphatic unsatd. monomers containing ≥ 1 primary amino group such as 3-aminopropyl vinyl ether on the surfaces. The resulting coated plastics are useful in sanitary articles and in medical goods.

IT 307493-26-1P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(production of inherently microbicidal polymer surfaces by surface-grafting with unsatd. monomers having primary amine groups)

RN 307493-26-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, hydrochloride, polymer with azacyclotridecan-2-one and methyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2420-94-2

CMF C6 H11 N O2 . Cl H

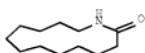


● HCl

CM 2

CRN 947-04-6

CMF C12 H23 N O



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM C08F291-00

10/537,467-310163-EIC SEARCH

ICS C08F226-00; B05D003-00; B05D005-00; C09D139-00
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5, 38, 63
 IT 307493-22-7P 307493-23-8P 307493-24-9P 307493-25-0P
 307493-26-1P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (production of inherently microbicidal polymer surfaces by surface-grafting with unsatd. monomers having primary amine groups)
 OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L77 ANSWER 11 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:463440 HCAPLUS Full-text
 DOCUMENT NUMBER: 131:117529
 TITLE: N-coordinated triallyl boron unit-containing antifouling agents and their compositions
 INVENTOR(S): Mori, Kiyomi; Tabuchi, Hitoshi; Takesawa, Toshiyuki
 PATENT ASSIGNEE(S): Nitto Kasei Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11199801	A	19990727	JP 1998-2636	1998 0108
PRIORITY APPLN. INFO.:			JP 1998-2636	1998 0108

ED Entered STN: 29 Jul 1999
 GI For diagram(s), see printed CA Issue.
 AB Title agents are polymers containing units I or II (R1, R2 = H, Me; R3 = halogen, Cl-8 alkyl or alkoxy; R4 = halogen, Cl-18 alkyl; Z = Cl-18 alkylene, phenylene, benzylene, CO, COOR5, OR5, COOR5OCO with R5 = Cl-18 alkylene, phenylene; X, Y = H, Cl-18 alkyl, aryl, COR6, or forming N-containing 5- or 6-membered ring, R6 = Cl-18 alkyl, aryl; k = 0-1; m, n = 0-3). Polymerizing Bu acrylate, 2-pyridylethyl methacrylate, and Me methacrylate at 80-85° and stirring with Ph3B at 40-45° for 8 h gave a polymer with 25% viscosity 135 cP and weight-average mol. weight of 27,000, which was mixed with pigments, a plasticizer, a dispersant, and organic solvents to form a coating giving nontacky films with good antifouling ability over 6 mo.
 IT 101818-63-7DP, reaction products with triphenylborane
 104988-57-5DP, reaction products with triphenylborane
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (N-coordinated triarylboron-containing acrylic polymers as antifouling agents)
 RN 101818-63-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-aminoethyl ester, polymer with butyl 2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7659-36-1
CMF C6 H11 N O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



RN 104888-57-5 HCPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
2-aminoethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7659-38-3
CMF C5 H9 N O2



CM 2

CRN 80-62-6
CMF C5 H8 O2



IC ICM C09D005-16
 ICS C09D133-14; C09D139-00; C08F008-42
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 IT 101818-63-7DP, reaction products with triphenylborane
 104688-57-5DP, reaction products with triphenylborane
 232618-62-1DP, reaction products with triphenylborane
 232618-63-2DP, reaction products with triphenylborane
 232618-64-3DP, reaction products with tri(p-tolylphenyl)borane
 232618-65-4DP, reaction products with tri(p-methoxyphenyl)borane
 232618-66-5DP, reaction products with triphenylborane
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 PRP (Properties); TEM (Technical or engineered material use); PREP
 (Preparation); USES (Uses)
 (N-coordinated triarylboron-containing acrylic polymers as
 antifouling agents)

L77 ANSWER 12 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:407270 HCPLUS Full-text
 DOCUMENT NUMBER: 131:75058
 TITLE: Aqueous antifouling resin and
 coating compositions with controlled active
 ingredient release
 INVENTOR(S): Yamashita, Hiroshi; Nakamura, Koki; Yonehara,
 Yoichi
 PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11172159	A	19990629	JP 1997-369729	1997 1211 ---
JP 4063377	B2	20080319	JP 1997-369729	1997 1211 ---

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 131:75058
 ED Entered STN: 01 Jul 1999
 AB The coating compns. contain (A) antifouling binders comprising aqueous resin emulsions containing (a) resins showing acid value 10-300 mg KOH/g and having divalent metal carboxylate structure (equivalent ratio of the carboxyl group to the metal 0.1-5) in or between mols. and (b) emulsifiers and (B) antifouling agents. Thus, methacrylic acid 18, methoxyethyl acrylate 20, and Et acrylate 62 parts were polymerized in AcOEt to give polymer solution (solids content 50%), 100 parts of which was treated with 8 parts ZnO in aqueous BuOH and mixed with Newcol 560SN (anionic surfactant) and H2O to give an emulsion (solids content 40%). A test plate was coated with an aqueous coating comprising the emulsion 62.5, Cu2O 30, BYK 190 (pigment dispersant) 2, red iron oxide 2, Aerosil 200 (SiO2) 0.5, and H2O 2 parts and soaked in seawater for 24 mo to show no attachment of organisms.

IT 116695-87-5P

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); IMP (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (controlled-release aqueous antifouling coatings containing metal carboxylate polymers)

RN 116695-87-5 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate, zinc salt (9CI) (CA INDEX NAME)

CM 1

CRN 25133-97-5

CMF (C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 140-88-5

CMF C5 H8 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC ICM C09D005-16

ICS C09D133-04; C09D201-08; C09D171-02; C09D125-04; C09D131-04

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 5

ST sq antifouling coating controlled release; metal carboxylate resin antifouling coating; zinc polyacrylate antifouling coating controlled release

IT Coating materials

(antifouling; controlled-release aqueous antifouling coatings containing metal carboxylate polymers)

- IT Emulsifying agents
 (controlled-release aqueous antifouling coatings containing metal carboxylate polymers)
- IT 1317-39-1, Copper oxide (Cu2O), uses
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
 (antifouling agent; controlled-release aqueous antifouling coatings containing metal carboxylate polymers)
- IT 116695-87-SP 228572-37-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (controlled-release aqueous antifouling coatings containing metal carboxylate polymers)
- IT 216252-82-3, JSR AE 175
 RL: BUU (Biological use, unclassified); POF (Polymer in formulation); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
 (controlled-release aqueous antifouling coatings containing metal carboxylate polymers)
- IT 9002-92-0, Noigen ET 160 9014-90-8, Newcol 560SN 228705-59-7,
 Elemenol ES 70
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsifier; controlled-release aqueous antifouling coatings containing metal carboxylate polymers)
- OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L77 ANSWER 13 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:70188 HCAPLUS Full-text
 DOCUMENT NUMBER: 130:169610
 TITLE: Antibacterial strippable aqueous emulsion paints
 INVENTOR(S): Amano, Takashi
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11021476	A	19990126	JP 1997-175022	1997 0630

PRIORITY APPLN. INFO.: JP 1997-175022
 1997
0630
 <--

ED Entered STN: 02 Feb 1999

AB Title paints contain bactericides and preferably acrylic resins containing ≥50% (meth)acrylate esters. An aqueous emulsion containing Bu acrylate-Bu methacrylate-Et acrylate-methacrylic acid-Me methacrylate copolymer and Bactekiller BM 103A was coated on a steel panel (for automobile body) and dried at 70° to form a film showing good antibacterial ability and strippability initially or after 500 h under weatherometer.

IT 71726-63-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);

10/537,467-310163-EIC SEARCH

USES (Uses)
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)

RN 71726-63-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, butyl 2-propenoate, ethyl 2-propenoate and
 methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2

CM 2

CRN 140-88-5
 CMF C5 H8 O2

CM 3

CRN 97-88-1
 CMF C8 H14 O2

CM 4

CRN 80-62-6
 CMF C5 H8 O2

CM 5

CRN 79-41-4
 CMF C4 H6 O2



IC ICM C09D005-20
 ICS C09D005-00; C09D005-02; C09D005-14; C09D133-06
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 ST eq antibacterial acrylic strippable paint automobile
 steel
 IT Zeolites (synthetic), uses
 RL: MOA (Modifier or additive use); POF (Polymer in formulation);
 USES (Uses)
 (Ag; bactericide-containing aqueous strippable
 emulsion coatings for automobiles or elec. components)
 IT A zeolites
 RL: MOA (Modifier or additive use); POF (Polymer in formulation);
 USES (Uses)
 (Ag; bactericide-containing aqueous strippable
 emulsion coatings for automobiles or elec. components)
 IT Antibacterial agents
 Coating materials
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)
 IT Acrylic polymers, uses
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)
 IT Automobiles
 (bodies; bactericide-containing aqueous strippable
 emulsion coatings for automobiles or elec. components)
 IT 71726-63-1P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)
 IT 168679-73-0, Silwel 210164-79-7, Novaron AGE 330 220385-11-5,
 Silver Ace M 300
 RL: MOA (Modifier or additive use); POF (Polymer in formulation);
 USES (Uses)
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)
 IT 12597-69-2, Steel, miscellaneous
 RL: MSC (Miscellaneous)
 (bactericide-containing aqueous strippable emulsion
 coatings for automobiles or elec. components)
 L77 ANSWER 14 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:521482 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 131:154766
 TITLE: Polymer bead agrochemical formulations
 INVENTOR(S): Podszun, Wolfgang; Priesnitz, Uwe; Kuehnhold,
 Juergen; Lembrich, Helmut
 PATENT ASSIGNEE(S): Bayer A.-G., Germany
 SOURCE: Ger. Offen., 12 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

10/537,467-310163-EIC SEARCH

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19805248	A1	19990812	DE 1998-19805248	
				1998 0210
WO 9940786	A1	19990819	WO 1999-EP562	
				1999 0128
			<--	
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZR, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GH, GW, ML, MR, NE, SN, TD, TG				
AU 9932514	A	19990830	AU 1999-32514	
				1999 0128
			<--	
PRIORITY APPLN. INFO.:			DE 1998-19805248	A
				1998 0210
			<--	
			WO 1999-EP562	W
				1999 0128
			<--	

ED Entered STN: 20 Aug 1999

AB Bead polymer formulations comprise (1) a particle-forming solid phase, containing styrene copolymerizate, ≥ 1 agrochem. active ingredient, and, if necessary, additives, whereby the content of active ingredient is 5-75% by weight and the particle size is 1-100 μm , and (2) optionally, a liquid phase. Thus, styrene 98, acrylonitrile 34, ethylhexyl acrylate 58, ethylene glycol dimethacrylate 10, dichlobenil 35.3, and toluene 559 g were mixed, the treated with 2 g dibenzoyl peroxide. The solution was transferred to a reactor containing 1.5 L of a 1% aqueous, alkaline (pH 8) solution of methacrylic acid-Me methacrylate (50:50) copolymer (dispersing agent), stirred (500 rpm, 8 h at 78° and 1 h at 85°), then the toluene was distilled off and part of the water removed to obtain 900 g of a bead polymer dispersion containing 4.2% dichlobenil. The formulation showed slow release of the herbicide.

IT 25086-15-1, Methacrylic acid-methyl methacrylate copolymer

RL: MOA (Modifier or additive use); USES (Uses)
(dispersing agents; in slow-release polymer bead
agrochem. formulation manufacture)

RN 25086-15-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl
2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 80-62-6
CMF C5 H8 O2



CM 2

CRN 79-41-4
CMF C4 H6 O2

IC ICM C08F212-08
 ICS C08F220-18; C08F220-44
 CC 5-6 (Agrochemical Bioregulators)
 Section cross-reference(s): 19, 38
 IT 28086-15-1, Methacrylic acid-methyl methacrylate
 copolymer
 RL: MOA (Modifier or additive use); USES (Uses)
 (dispersing agents; in slow-release polymer bead
 agrochem. formulation manufacture)
 OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE
 THIS RECORD (3 CITINGS)

L77 ANSWER 15 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:287125 HCAPLUS Full-text
 DOCUMENT NUMBER: 129:17110
 ORIGINAL REFERENCE NO.: 129:3657a, 3660a
 TITLE: Electrodeposition process for aluminum
 (alloys)
 INVENTOR(S): Kayamori, Satoshi; Ishii, Hiroaki; Suzuki,
 Takashi
 PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan;
 Sankyo Aluminium Industry Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10121294	A	19980512	JP 1996-287308	1996 1011 -->
JP 3320322	B2	20020903	JP 1996-287308	1996 1011 -->
PRIORITY APPLN. INFO.:				

ED Entered STN: 16 May 1998
 AB The anodically oxidized or chemical treated Al (alloy) substrates are electrodeposited with aqueous dispersion coatings containing anionic resins, aminoplasts, and bactericides AgaAbM₂(PO₄)₃.nH₂O (I; A = alkali metal, alkaline earth metal, NH₄, or H; M = tetravalent metal; a, b > 0 with a + mb = 1 where m = valent number of A; n = 0-6). An aqueous composition containing acrylic acid-Bu methacrylate-2-hydroxyethyl acrylate-Me methacrylate-styrene copolymer dimethylethanolamine salt, Cymel 235, and 0.5 phr I (A = NH₄, M = Zr, a = 0.013, b = 0.987, n = 0) showed good storage stability for 1 mo and was electrodeposited on an Al plate to a 10-μm thickness to form a plate with good appearance and bactericidal ability.
 IT 207618-73-3P 207618-75-5P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered)

10/537,467-310163-EIC SEARCH

material use); PREP (Preparation); USES (Uses)
 (aqueous electrodepositing coatings containing specific
 silver bactericides for aluminum (alloys))
 RN 207618-73-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 ethenylbenzene, 2-hydroxyethyl 2-propenoate, methyl
 2-methyl-2-propenoate and 2-propenoic acid, compd. with
 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0
CMF C4 H11 N O

CM 2

CRN 67953-58-6
CMF (C8 H14 O2 . C8 H8 . C5 H8 O3 . C5 H8 O2 . C3 H4 O2)x
CCI PMS

CM 3

CRN 818-61-1
CMF C5 H8 O3

CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 97-88-1
CMF C8 H14 O2

CM 6

CRN 80-62-6
 CMF C5 H8 O2



CM 7
 CRN 79-10-7
 CMF C3 H4 O2



RN 207618-75-5 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl
 2-methyl-2-propenoate, ethenylbenzene, 2-hydroxyethyl
 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid,
 compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1
 CRN 108-01-0
 CMF C4 H11 N O



CM 2
 CRN 207618-74-4
 CMF (C8 H14 O2 . C8 H8 . C5 H8 O3 . C5 H8 O2 . C4 H6 O2 . C3 H4
 O2)x
 CCI PMS
 CM 3
 CRN 818-61-1
 CMF C5 H8 O3



CM 4
 CRN 100-42-5

CMF C8 H8



CM 5

CRN 97-88-1
CMF C8 H14 O2

CM 6

CRN 80-62-6
CMF C5 H8 O2

CM 7

CRN 79-41-4
CMF C4 H6 O2

CM 8

CRN 79-10-7
CMF C3 H4 O2

IC ICM C25D013-00
 ICS C09D005-14; C09D005-44; C25D013-06
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5, 56
 ST electrodeposition as coating silver bactericide

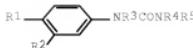
10/537,467-310163-EIC SEARCH

aluminum; storage stability silver bactericide electrodeposition coating
 IT Electrodepositos
 (aqueous dispersions containing specific silver bactericides for aluminum (alloys))
 IT Acrylic polymers, uses
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))
 IT 147787-35-7P, Ammonium silver zirconium phosphate ((NH4)0.998g0.01Zr2(PO4)3)
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))
 IT 207618-73-3P 207618-75-5P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))
 IT 7429-90-5, Aluminum, miscellaneous
 RL: MSC (Miscellaneous)
 (aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))
 IT 15438-04-7P, Zirconium phosphate
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (for bactericide manufacture; aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))
 IT 7722-76-1, Ammonium dihydrophosphate 7761-88-8, Silver nitrate, reactions 14644-61-2, Zirconium sulfate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for bactericide manufacture; aqueous electrodepositing coatings containing specific silver bactericides for aluminum (alloys))

L77 ANSWER 16 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1997:475598 HCPLUS Full-text
 DOCUMENT NUMBER: 127:122738
 ORIGINAL REFERENCE NO.: 127:23667a,23670a
 TITLE: Antifouling poly(ethylene terephthalate) films for agricultural use
 INVENTOR(S): Yamagishi, Hiroshi; Suga, Mutsuo; Obayashi, Atsushi; Onishi, Shunichi
 PATENT ASSIGNEE(S): Mitsubishi Kasei Vinyl K. K., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 13 pp.
 CODEN: JKXZAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09164642	A	19970624	JP 1995-327075	1995 1215 ---
PRIORITY APPLN. INFO.:			JP 1995-327075	1995 1215 ---

OTHER SOURCE(S): MARPAT 127:122738
 ED Entered STN: 30 Jul 1997
 GI



AB The films, useful for greenhouses, etc., comprise biaxially drawn poly(ethylene terephthalate) (I) films, one side of which is coated with acrylic polymer coatings containing UV absorbers, ≥ 1 phenylurea derivative II ($\text{R}_1 = \text{H}$, halo, lower alkyl, lower alkoxy, p -ClPhO, p -MeOPhO; $\text{R}_2 = \text{H}$, halo, CF₃, OC₂NHCMe₃; R₃, R₄ = H, lower alkyl; R₅ = H, lower alkyl, lower alkoxy, α -MeC₆H₁₀; CMe₂C₆H₅; CHMeCCH), and Zn dimethyldithiocarbamate (III) and the other side of which is coated with coatings from (a) aqueous dispersion of hydrophobic acrylic polymers with glass-transition temperature 35-80°, (b) 100 parts inorg. colloid sol, and (c) 0.01-30 parts water-soluble inorg. Cl derivs. Thus, an acrylic polymer solution containing 6.5 parts allyl acrylate-allyl methacrylate-Bu acrylate-Me methacrylate-styrene graft copolymer and 13.5 parts Et methacrylate-Me methacrylate copolymer (solid content 20%) was blended with 2-(2'-hydroxy-5'-tert-butylphenyl)benzotriazole 14, dichlorophenylmethyldimethylurea 2.5, and III 2.5 parts, applied on a biaxially drawn I and a composition containing Bu methacrylate-Me methacrylate copolymer 2.0, colloidal silica 3.0, HCl 0.0004, and H₂O/EtOH (3/1) 95 parts was applied on the other side of the I film to give a film showing good adhesion of coatings to I, good transparency, and good antifouling and antifouling property.

IT 25585-75-5P, Acrylic acid-ethyl acrylate-methyl methacrylate-styrene copolymer 38622-62-7P, Acrylic acid-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 52030-79-2P, Acrylic acid-ethyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate-styrene copolymer

RL: AGR (Agricultural use); IMF (Industrial manufacture); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antifouling transparent poly(ethylene terephthalate) films for agricultural use)

RN 25585-75-5 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5

CMF C5 H8 O2



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

RN 38622-62-7 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and
 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C6 H10 O3

CM 2

CRN 103-11-7
CMF C11 H20 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-10-7
CMF C₃ H₄ O₂

RN 52030-79-2 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with
 ethenylbenzene, ethyl 2-propenoate, methyl 2-methyl-2-propenoate
 and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C₆ H₁₀ O₃

CM 2

CRN 140-88-5
CMF C₅ H₈ O₂

CM 3

CRN 100-42-5
CMF C₈ H₈

CM 4

CRN 80-62-6

CMF C5 H8 O2



CM 5

CRN 79-10-7
CMF C3 H4 O2

IC ICM B32B027-36
 ICS A01G009-14; B32B027-18; B32B027-30; C08J007-04
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 5, 42
 ST antifouling polyethylene terephthalate agricultural film; coating
 antifouling transparent PET film greenhouse; acrylic antifouling
 coating UV absorber phenylurea; zinc thiocarbamate acrylic coating
 antifouling; inorg colloid sol chlorine antifouling
 coating
 IT 25585-75-5P, Acrylic acid-ethyl acrylate-methyl
 methacrylate-styrene copolymer 25608-33-7P, Butyl
 methacrylate-methyl methacrylate copolymer 38622-62-7P
 , Acrylic acid-2-ethylhexyl acrylate-2-hydroxyethyl
 methacrylate-methyl methacrylate copolymer 52030-79-2P
 , Acrylic acid-ethyl acrylate-2-hydroxyethyl methacrylate-methyl
 methacrylate-styrene copolymer 116843-65-3P, Allyl
 acrylate-allyl methacrylate-butyl acrylate-1,3-butylene
 dimethacrylate-methyl methacrylate graft copolymer 116843-70-0P,
 Allyl acrylate-allyl methacrylate-butyl acrylate-methyl
 methacrylate-styrene graft copolymer
 RL: AGR (Agricultural use); IMF (Industrial manufacture); PRP
 (Properties); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (antifouling transparent poly(ethylene terephthalate) films for
 agricultural use)
 IT 7631-86-9, Silica, uses
 RL: AGR (Agricultural use); MOA (Modifier or additive use); PRP
 (Properties); BIOL (Biological study); USES (Uses)
 (colloidal; antifouling transparent poly(ethylene
 terephthalate) films for agricultural use)

L77 ANSWER 17 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1997:283950 HCPLUS [Full-text](#)
 DOCUMENT NUMBER: 126:260442
 ORIGINAL REFERENCE NO.: 126:50345a,50348a
 TITLE: Aqueous acrylic resin
 emulsions containing N-alkylpolyamines
 and long-lasting antifouling agents
 INVENTOR(S): Nohashi, Kenzo; Saeki, Yasushi; Ando, Masahiro
 PATENT ASSIGNEE(S): Katayama Chemical Works Co, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese

10/537-467-310163-EJC SEARCH

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09052803	A	19970225	JP 1995-202530	1995 0808
RITY APPLN. INFO.:				<-- JP 1995-202530
				1995 0808

OTHER SOURCE(S): MARPAT 126:260442

ED Entered STN: 03 May 1997

AB Title agents comprise emulsions manufactured by emulsion polymerization of (meth)acrylic monomers and optional other monomers in aqueous media in the presence of R[NH(CH₂)₃]nNH₂ [I; R = aliphatic C₈-28 (β -hydroxy)hydrocarbyl, C₈-28 alkoxy(Cl-6 alkyl); n = 1-5]. Bu acrylate 20, Me methacrylate 15, and acrylic acid 5 g were polymerized in an aqueous solution containing I (R = oleyl, n = 3) HCl salt at 70° for 5 h to give a resin emulsion, 70 parts of which was mixed with acrylic resin 3, coumarone resin 3, and HZO 24 parts and applied to a fish net to prevent adhesion of marine organisms for >3 mo.

IT 26300-51-6P, Acrylic acid-butyl acrylate-methyl

methacrylate copolymer.

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(long-lasting anti-

acrylic resin emulsions containing alkylpolyamines)

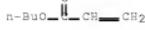
26300-51-6 HCPLUS

2-Prop

2-propenoate and 2-

CM 1

CMF C



CM 2

CRN 80-62-6

CMF C5 H8 02



CM 3

CRN 79-10-7

CMF C3 H4 Q2



IC ICM A01N033-04
 ICS A01N025-04; A01N025-10; A01N025-22; A01N033-08; C08F002-24;
 C08F002-44

CC 5-4 (Agrochemical Bioregulators)
 Section cross-reference(s): 42

ST antifouling polyacrylate emulsion polyamine coating

IT Amines, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (coco alkyl; long-lasting antifouling agents comprising aqueous acrylic resin emulsions containing alkylpolyamines)

IT Antifouling agents
 (marine; long-lasting antifouling agents comprising aqueous acrylic resin emulsions containing alkylpolyamines)

IT Amines, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (tallow alkyl; long-lasting antifouling agents comprising aqueous acrylic resin emulsions containing alkylpolyamines)

IT 56-18-8D, Dipropylenetriamine, N-tallow alkyl derivs. 78-90-0D,
 Propylenediamine, N-tallow alkyl derivs. 4605-14-5D,
 Tripropylenetetramine, N-fatty alkyl derivs. 67228-83-5
 185997-67-5 185997-70-0
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (long-lasting antifouling agents comprising aqueous acrylic resin emulsions containing alkylpolyamines)

IT 25265-15-OP, 2-Ethylhexyl acrylate-methyl methacrylate copolymer
 25767-47-9P, Butyl acrylate-styrene copolymer 25852-37-3P, Butyl acrylate-methyl methacrylate copolymer 26300-51-6P,
 Acrylic acid-butyl acrylate-methyl methacrylate copolymer 27136-15-8P, Butyl acrylate-methyl methacrylate-styrene copolymer 30473-93-9P, Methyl methacrylate-stearyl methacrylate copolymer 130261-89-1P
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (long-lasting antifouling agents comprising aqueous acrylic resin emulsions containing alkylpolyamines)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L77 ANSWER 18 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 19971223964 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 126:213429
 ORIGINAL REFERENCE NO.: 126:41257a,41260a
 TITLE: Antifogging acrylic compositions
 INVENTOR(S): Ishimaru, Kazutomi
 PATENT ASSIGNEE(S): Okamoto Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

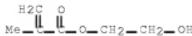
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09040941	A	19970210	JP 1995-195365	
				1995 0731 ---
PRIORITY APPLN. INFO.:			JP 1995-195365	1995 0731 ---

ED Entered STN: 07 Apr 1997
 AB Title compns. contain acrylic polymers with a glass-transition temperature (Tg) 40-75°, nonionic surfactants, and 3-crystalline layer-containing infinitely expandable clay minerals in water and/or alc. solvents. An elec. corona-treated polyethylene film was sprayed with a composition of acrylic acid-Bu methacrylate-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer (with Tg 60°) 0.2, a sugar ester 0.01, an epoxy crosslinker 0.01, a 4% hectorite-containing aq. dispersion 5.0, water 30, and iso-ProOH 20 parts and dried at 90° for 5 min to form a film with good antifogging ability initially and after 4 wk.

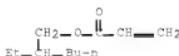
IT 188001-60-7P, Acrylic acid-butyl methacrylate-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (smectite mineral-containing antifogging acrylic coatings for plastic films)

RN 188001-60-7 MCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9
 CMF C6 H10 O3

CM 2

CRN 103-11-7
 CMF C11 H20 O2

CM 3

CRN 97-88-1
 CMF C8 H14 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-41-4
CMF C4 H6 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

IC ICM C09K003-18
 ICS A01G009-14; C08J007-04; C09D005-00; C09D007-12; C09D133-08
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 IT 188001-60-7P, Acrylic acid-butyl
 methacrylate-2-ethylhexyl acrylate-2-hydroxyethyl
 methacrylate-methacrylic acid-methyl methacrylate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered
 material use); PREP (Preparation); USES (Uses)
 (smectite mineral-containing antifogging acrylic coatings for
 plastic films)

L77 ANSWER 19 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1995:573942 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 122:308762
 ORIGINAL REFERENCE NO.: 122:56037a, 56040a
 TITLE: Storage and dilution of stable aqueous
 dispersions

10/537,467-310163-EIC SEARCH

INVENTOR(S): Mulqueen, Patrick Joseph; Banks, Graham;
 Lubetkin, Steven Duff; Fowles, Andrew Mark
 PATENT ASSIGNEE(S): DowElanco, USA
 SOURCE: PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9507614	A1	19950323	WO 1994-US10416	1994 0914
			<--	
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, US, UZ RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2171848	A1	19950323	CA 1994-2171848	1994 0914
			<--	
CA 2171848	C	20070102		
AU 9478355	A	19950403	AU 1994-78355	1994 0914
			<--	
AU 691835	B2	19980528		
BR 9407501	A	19960625	BR 1994-7501	1994 0914
			<--	
EP 719086	A1	19960703	EP 1994-929214	1994 0914
			<--	
EP 719086	B1	20060621		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 74022	A2	19961028	HU 1996-655	1994 0914
			<--	
HU 217665	B	20000328		
JP 09510180	T	19971014	JP 1995-509350	1994 0914
			<--	
JP 3843122	B2	20061108		
AT 330469	T	20060715	AT 1994-929214	1994 0914
			<--	
ES 2263150	T3	20061201	ES 1994-929214	1994 0914
			<--	
ZA 9407147	A	19960315	ZA 1994-7147	1994 0915
			<--	
IL 110993	A	19980715	IL 1994-110993	

		1994 0918
		<--
US 6074986	A	20000613 US 1996-615326
		1996 0802
		<--
PRIORITY APPLN. INFO.:		GB 1993-19129 A
		1993 0915
		<--
		WO 1994-US10416 W
		1994 0914
		<--

ED Entered STN: 26 May 1995
 AB A formulation e.g., a pesticidal formulation in the form of a dispersion comprising a continuous aqueous phase, and a discontinuous phase comprising a non-aqueous material capable of transport through the aqueous phase to cause Ostwald ripening of the dispersion, wherein there is contained within the discontinuous phase a pesticidal material, which may or may not be the said non-aqueous material, wherein the discontinuous phase comprises a stabilizer in an amount sufficient to depress migration of the non-aqueous material through the aqueous phase, and thereby diminish or prevent Ostwald ripening of the dispersion, characterized in that the stabilizer has a mol. weight of not more than 10,000, and is soluble in the discontinuous phase, but insol. in and not transportable through the aqueous phase. The production of the formulation can be carried out in a metered in-line mixing plant, since the thermodn. of the mixing process of such that the particle size tends to a predictable value.

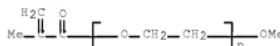
IT 111740-36-4, Atlox 4913
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (pesticidal stable aqueous dispersions)

RN 111740-36-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl
 2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)-
 ω -methoxypoly(oxy-1,2-ethanediyl), graft (CA INDEX NAME)

CM 1

CRN 26915-72-0
 CMF (C₂H₄O)_n C₅H₈O₂
 CCI PMS



CM 2

CRN 80-62-6
 CMF C₅H₈O₂



CM 3

CRN 79-41-4
CMF C4 H6 O2



IC ICM A01N025-04
ICS A01N025-28; B01F017-00; B01J013-00
CC 5-6 (Agrochemical Bioregulators)
ST pesticide formulation aq dispersion
IT Solvents
(pesticidal stable aqueous dispersions)
IT Aromatic hydrocarbons, biological studies
Siloxanes and Silicones, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(pesticidal stable aqueous dispersions)
IT Agrochemical formulations
Fungicides and Fungistats
Herbicides
Insecticides
Pesticides
(stable aqueous dispersions)
IT 90-12-0, 1-Methylnaphthalene 108-88-3, Toluene, biological
studies 112-62-9, Methyl oleate 122-32-7, Glyceryl trioleate
1330-20-7, Xylene, biological studies 2921-88-2, Chlorpyrifos
9002-89-5 9003-11-6, Ethyleneoxide/propyleneoxide copolymer
9003-27-4 9003-53-6, Polystyrene 9003-95-6, Polyvinylstearate
9004-57-3, Ethyl cellulose 25190-06-1 25322-69-4,
Polypropylene glycol 25639-21-8, Polyoctadecylmethacrylate
29387-86-8, Dowanol PNB 67564-91-4, Fenpropimorph 69377-81-7,
Fluroxypyr 111740-38-4, Atlox 4913 124495-18-7
163648-62-2, Atlox 4912
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(pesticidal stable aqueous dispersions)
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE
THIS RECORD (7 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L77 ANSWER 20 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:951923 HCAPLUS Full-text
DOCUMENT NUMBER: 124:59727
ORIGINAL REFERENCE NO.: 124:1120la,11204a
TITLE: Chitosan-polymer composites, their
manufacture, and their compositions with good
antimicrobial properties and durability
INVENTOR(S): Yoshikawa, Takeshi; Tsuruya, Katsumasa;
Umezawa, Kanetoshi; Onozaki, Toshio; Kuwamura,
Shinichi; Yoshino, Fumio
PATENT ASSIGNEE(S): Tochigi Prefecture, Japan; Dainippon Ink &
Chemicals
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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10/537,467-310163-EIC SEARCH

JP 07242772

A

19950919

JP 1992-5191

1992

0114

<--

PRIORITY APPLN. INFO.:

JP 1992-5191

1992

0114

<--

ED Entered STN: 30 Nov 1995

AB Title compns. contain organic binders and chitosan-polymer composites prepared by polymerization of α,β -ethylenically unsatd. monomers in the presence of decomposed chitosan in aqueous media and optionally removing the aqueous media to give powders. The compns. are useful as antimicrobial agents for fibers, etc. Thus, Me methacrylate, ethylene glycol dimethacrylate, styrene, divinylbenzene, acrylic acid, and N-methylolacrylamide were emulsion polymerized in the presence of cellulase-treated decomposed chitosan to give a composite, which was mixed with Finedic to give a durable composition showing good antimicrobial properties for *Staphylococcus epidermidis*.

IT 132176-73-9P

RL: PNU (Preparation, unclassified); POF (Polymer in formulation);
TEM (Technical or engineered material use); PREP (Preparation);

USES (Uses)

(chitosan-polymer composites, their manufacture, and their compns.
with good antimicrobial properties and durability)

RN 132176-73-9 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
diethenylbenzene, ethenylbenzene, N-(hydroxymethyl)-2-propenamide,
methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX
NAME)

CM 1

CRN 1321-74-0

CMF C10 H10

CCI IDS



2 [D1 - CH = CH2]

CM 2

CRN 924-42-5

CMF C4 H7 N O2



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 97-90-5
CMF C10 H14 O4

CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

IC ICM C08L005-08
 ICS A61K047-36; C08F002-16; C08F002-44; C08L101-00
 CC 44-5 (Industrial Carbohydrates)
 Section cross-reference(s): 5, 38, 40
 IT Polymerization
 (emulsion, chitosan-polymer composites, their manufacture,
 and their compns. with good antimicrobial properties and
 durability)
 IT 9012-76-4DP, Chitosan, hydrolyzed 132176-73-9P
 RL: PNU (Preparation, unclassified); POF (Polymer in formulation);
 TEM (Technical or engineered material use); PREP (Preparation);
 USES (Uses)
 (chitosan-polymer composites, their manufacture, and their compns.
 with good antimicrobial properties and durability)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)

L77 ANSWER 21 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1994:109529 HCAPLUS Full-text
 DOCUMENT NUMBER: 120:109529

ORIGINAL REFERENCE NO.: 120:19327a, 19330a
 TITLE: Dispersions of biocidal polymers
 INVENTOR(S): Huth, Hans Ullrich; Linder, Wolfgang
 PATENT ASSIGNEE(S): Hoechst A.-G., Germany
 SOURCE: Ger. Offen., 12 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4142731	A1	19930624	DE 1991-4142731	1991 1221
CA 2085323	A1	19930622	CA 1992-2085323	<-- 1992 1214
EP 548726	A1	19930630	EP 1992-121241	<-- 1992 1214
EP 548726 R: AT, BE, DE, ES, FR, GB, GR, IE, IT, NL, SE AT 128151	B1 T	19950920 19951015	AT 1992-121241	<-- 1992 1214
ES 2079777	T3	19960116	ES 1992-121241	1992 1214
AU 9230205	A	19930624	AU 1992-30205	<-- 1992 1217
AU 654221 JP 05255020	B2 A	19941027 19931005	JP 1992-339328	<-- 1992 1218
US 5252321	A	19931012	US 1992-994138	<-- 1992 1221
US 5319093	A	19940607	US 1993-39923	<-- 1993 0329
PRIORITY APPLN. INFO.:			DE 1991-4142731	<-- A 1991 1221
			US 1992-994138	<-- A3 1992 1221

ED Entered STN: 05 Mar 1994
 AB The title dispersions, having algicidal and fungicidal activity and useful in coatings, plaster, textile finishing, etc., contain copolymers of BCM salts of unsatd. carboxylic, sulfonic, or phosphonic acids. Emulsion polymerization of MMA 182.1, Bu acrylate 183.1, and acrylic acid 11.25 g containing 1.1 g BCM gave a 44.7% dispersion

10/537,467-310163-EIC SEARCH

of copolymer with min. film-forming temperature 7° and BCM content 0.28%. This dispersion was used in coatings with good activity vs. fungi and algae.

IT 152751-52-5P 153245-08-0P

153245-10-4P

RL: PREP (Preparation)

(biocidal, aqueous dispersions, manufacture of)

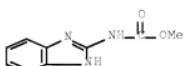
RN 152751-52-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid, compd. with methyl 1H-benzimidazol-2-ylcarbamate (9CI) (CA INDEX NAME)

CM 1

CRN 10605-21-7

CMF C9 H9 N3 O2



CM 2

CRN 26300-51-6

CMF (C7 H12 O2 . C5 H8 O2 . C3 H4 O2)x
CCI PMS

CM 3

CRN 141-32-2

CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



CM 5

CRN 79-10-7

CMF C3 H4 O2



RN 153245-08-0 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 ethenylbenzene, methyl 1H-benzimidazol-2-ylcarbamate
 mono[2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate],
 methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX
 NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

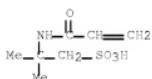
CRN 79-10-7
CMF C3 H4 O2



CM 6
CRN 153245-07-9
CMF C9 H9 N3 O2 . C7 H13 N O4 S

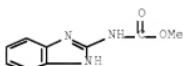
CM 7

CRN 15214-89-8
CMF C7 H13 N O4 S



CM 8

CRN 10605-21-7
CMF C9 H9 N3 O2



RN 153245-10-4 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
methyl 1H-benzimidazol-2-ylcarbamate mono(2-methyl-2-propenoate),
methyl 1H-benzimidazol-2-ylcarbamate mono-2-propenoate, methyl
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2



10/537,467-310163-EIC SEARCH

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-41-4
CMF C4 H6 O2

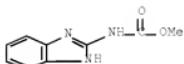
CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 153245-09-1
CMF C9 H9 N3 O2 . C3 H4 O2

CM 6

CRN 10605-21-7
CMF C9 H9 N3 O2

CM 7

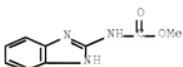
CRN 79-10-7
CMF C3 H4 O2



CM 8

CRN 153245-05-7
CMF C9 H9 N3 O2 . C4 H6 O2

CM 9

CRN 10605-21-7
CMF C9 H9 N3 O2

CM 10

CRN 79-41-4
CMF C4 H6 O2

IC ICM C08F020-04
 ICS C08F022-02; C08F028-02; C08F030-02; C08F012-30; C08F020-58;
 C08F020-60; C08F008-44; C07D235-32; C07D235-30; C09D005-14;
 A01N047-18

ICA C08F002-24; C08F002-20; C09D135-00; C09D141-00; C09D143-02;
 C09D125-18; C09D133-24; C09D133-04

CC 42-5 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5, 40, 43

IT Aligicides

Fungicides and Fungistats
 (BCM copolymers, in aqueous dispersion)

IT 152751-52-5P 153245-06-8P 153245-08-0P
 153245-10-4P 153245-11-5P

RL: PREP (Preparation)
 (biocidal, aqueous dispersions, manufacture of)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE
 THIS RECORD (4 CITINGS)

L77 ANSWER 22 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1992:216432 HCAPLUS Full-text
 DOCUMENT NUMBER: 116:216432
 ORIGINAL REFERENCE NO.: 116:36669a,36672a
 TITLE: Antiblocking marine antifouling coating
 materials
 INVENTOR(S): Okamoto, Yoshihiro; Hasegawa, Yoshiki

10/537,467-310163-EIC SEARCH

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04008773	A	19920113	JP 1990-108812	
				1990 0426

PRIORITY APPLN. INFO.: JP 1990-108812

1990
0426

<--

ED Entered STN: 31 May 1992

AB The title materials contain, as vehicles, aqueous dispersions of organic components (A) and inorg. components wherein the A is obtained by emulsion polymerization of unsatd. monomers in the presence of colloidal silica (I). Thus, 2-ethylhexyl acrylate 40, Me methacrylate 59, acrylic acid 1, and γ -methacryloxypropyltrimethoxysilane 0.5 were polymerized in an aqueous emulsion containing Snowtex (I) 30 parts at 60-70° and neutralized by aqueous NH3 to give a 40%-solid dispersion, 50 parts of which was mixed with Texanol 5, Ph3SnOH 5, Cu2O 35, red iron oxide 3, and ethylene glycol 2 part to give a coating composition. A sandblasted steel sheet coated with the composition showed drying time 5 h, good blocking resistance, and marine fouling area 0% after 36 mo in ocean.

IT 101992-11-4P

RL: PREP (Preparation)
 (preparation of, by emulsion polymerization in presence of
 colloidal silica, for antiblocking antifouling
 coatings)

RN 101992-11-4 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 2-ethylhexyl 2-propenoate, 2-propenoic acid and
 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 92488-31-8

CMF (C11 H20 O2 . C10 H20 O5 Si . C5 H8 O2 . C3 H4 O2)x
 CCI PMS

CM 2

CRN 2530-85-0

CMF C10 H20 O5 Si



CM 3

CRN 103-11-7
 CMF C11 H20 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

IT 141137-84-0P 141137-85-1P

RL: PREP (Preparation)

(preparation of, by emulsion polymerization in presence of colloidal silica, for blocking-resistant antifouling coatings)

RN 141137-84-0 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)

CM 1

CRN 128724-68-5

CMF (C11 H20 O2 . C10 H20 O5 Si . C8 H8 . C5 H8 O2 . C3 H4 O2)x
CCI PMS

CM 2

CRN 2530-85-0

CMF C10 H20 O5 Si



10/537,467-310163-EIC SEARCH

CM 3

CRN 103-11-7
CMF C11 H20 O2

CM 4

CRN 100-42-5
CMF C8 H8

CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-10-7
CMF C3 H4 O2

RN 141137-85-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 ethenyltriethoxysilane, 2-ethylhexyl 2-propenoate and 2-propenoic
 acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 109834-81-3
 CMF (C11 H20 O2 . C8 H18 O3 Si . C5 H8 O2 . C3 H4 O2)x
 CCI PMS

CM 2

CRN 103-11-7

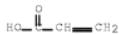
CMF C11 H20 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 78-08-0
CMF C8 H18 O3 Si

IC ICM C09D005-14
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 ST blocking resistance coating acrylic polymer; marine antifouling
 coating acrylic polymer; colloidal silica polyacrylate
 coating; emulsion polymer polyacrylate coating
 IT Coating materials
 (antifouling, marine, paints, vinyl polymers, containing
 colloidal silica, with good blocking resistance)
 IT Fouling control agents
 (coatings, marine paints, vinyl polymers, containing
 colloidal silica, with good blocking resistance)
 IT Polymerization
 (emulsion, of vinyl monomers, in presence of
 colloidal silica, for antifouling coatings)

IT 1317-39-1, Cuprous oxide, miscellaneous
 RL: MSC (Miscellaneous)
 (antifouling agents, for aqueous vinyl polymer
 dispersion coatings)

IT 7631-86-9, Silica, uses
 RL: USES (Uses)
 (colloidal, aqueous vinyl polymer
 dispersion containing, for marine antifouling coatings)

IT 101992-11-4P
 RL: PREP (Preparation)
 (preparation of, by emulsion polymerization in presence of
 colloidal silica, for antiblocking antifouling
 coatings)

IT 141137-84-0P 141137-85-1P
 RL: PREP (Preparation)
 (preparation of, by emulsion polymerization in presence of
 colloidal silica, for blocking-resistant antifouling
 coatings)

L77 ANSWER 23 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1991:145657 HCAPLUS Full-text
 DOCUMENT NUMBER: 114:145657
 ORIGINAL REFERENCE NO.: 114:24699a,24702a
 TITLE: Antifouling coating materials
 INVENTOR(S): Kato, Naoyuki; Awata, Takeshi
 PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03006266	A	19910111	JP 1989-140783	
				1989
				0602
<--				
PRIORITY APPLN. INFO.:			JP 1989-140783	
				1989
				0602
<--				

OTHER SOURCE(S): MARPAT 114:145657
 ED Entered STN: 19 Apr 1991
 AB Coating materials contain aqueous anionic resin dispersions 100 (solids), quaternary ammonium cationic surfactants 3-50, and Cu ion-forming substances 5-70 parts. Thus, an antifouling coating material for nylon fish nets contains 8:8:189:195 acrylamide-acrylic acid-Bu acrylate-Me methacrylate copolymer ammonium salt (.apprx.50% solids) 100, Arquad S-50 (alkyltrimethylammonium chloride) 8, an amphoteric surfactant 20, Cu powder 40, butyl Cellosolve 8, and water 100 parts.

IT 118037-58-4, Acrylamide-acrylic acid-butyl acrylate-methyl methacrylate copolymer ammonium salt
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, containing quaternary ammonium compds. and copper,
 antifouling, for nylon fish nets)

RN 118037-58-4 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenamide and 2-propenoic acid, ammonium salt (CA INDEX NAME)

CM 1

CRN 344477-72-8
 CMF (C7 H12 O2 . C5 H8 O2 . C3 H5 N O . C3 H4 O2)x
 CCI PMS

CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

IC ICM C09D005-14
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 IT 118037-58-4, Acrylamide-acrylic acid-butyl
 acrylate-methyl methacrylate copolymer ammonium salt
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, containing quaternary ammonium compds. and copper,
 antifouling, for nylon fish nets)

L77 ANSWER 24 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:134365 HCPLUS Full-text
 DOCUMENT NUMBER: 112:134365
 ORIGINAL REFERENCE NO.: 112:22605a, 22608a

10/537,467-310163-EIC SEARCH

TITLE: Viscoelastic properties of aqueous concentrated pesticidal suspension concentrates

AUTHOR(S): Tadros, Th. F.; Zsednai, A.

CORPORATE SOURCE: Jealott's Hill Res. Stn., ICI Agrochem., Bracknell/Berkshire, RG12 6EY, UK

SOURCE: Colloids and Surfaces (1990), 43(1), 95-103

CODEN: COSUD3; ISSN: 0166-6622

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 13 Apr 1990

AB The viscoelastic properties of aqueous concentrated ethirimol suspensions, stabilized using a graft copolymer, e.g. Atlox 4913, was investigated as a function of the volume fraction of the suspension. Viscosity-volume fraction curves showed that the dispersions deviate from hard sphere dispersions due to the possible contribution of van der Waals attraction at close distances of separation. From the oscillatory measurements, the complex modulus G^* , storage modulus G' and loss modulus G'' were obtained as a function of frequency at various suspension volume fractions. The results showed that the dispersion changed from being more viscous ($G'' > G'$) to more elastic ($G' > G''$) over a narrow range of volume fraction ϕ of the dispersion ($\phi > 0.5$). At this volume fraction, weak van der Waals attraction occurs, leading to an elastic structure. At very high volume fraction, the elastic structure is the result of strong repulsion between the copolymer chains which may undergo interpenetration and/or compression when the distance of separation between the particles become comparable to twice the adsorbed layer thickness.

IT 111740-36-4

RL: BIOL (Biological study)
(viscoelasticity of ethirimol suspensions stabilized with)

RN 111740-36-4 HCPLUS

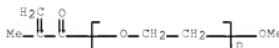
CN 2-Propenoic acid, 2-methyl-, polymer with methyl
2-methyl-2-propenoate and α -(2-methyl-1-oxo-2-propenyl)-
 ω -methoxypoly(oxy-1,2-ethanediyl), graft (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C₂H₄O)_n C₅H₈O₂

CCI PMS



CM 2

CRN 80-62-6

CMF C₅H₈O₂



CM 3

CRN 79-41-4
CMF C4 H6 O2



CC 5-2 (Agrochemical Bioregulators)
 Section cross-reference(s): 66
 ST viscoelasticity pesticide suspension conc
 IT Viscoelasticity
 (of pesticidal suspension concs.)
 IT 111740-36-4
 RL: BIOL (Biological study)
 (viscoelasticity of ethirimol suspensions stabilized
 with)
 IT 23947-60-6, Ethirimol
 RL: BIOL (Biological study)
 (viscoelasticity of suspension concs. of)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE
 THIS RECORD (1 CITINGS)

L77 ANSWER 25 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1990:160641 HCAPLUS Full-text
 DOCUMENT NUMBER: 112:160641
 ORIGINAL REFERENCE NO.: 112:27143a,27146a
 TITLE: Aqueous dispersions of
 acrylic resins for coating compositions
 INVENTOR(S): Tsukamoto, Takeo
 PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01234416	A	19890919	JP 1988-59988	1988 0314
JP 2544772	B2	19961016	JP 1988-59988	1988 0314

PRIORITY APPN. INFO.: <--
 <--

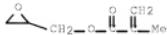
ED Entered STN: 28 Apr 1990
 AB The title compns. contain aqueous acrylic copolymers containing 0.3-2% epoxides and polyhydrazide dispersions. Thus, coatings from a mixture of 50% Me methacrylate-2-ethylhexyl acrylate-methacrylic acid-glycidyl methacrylate copolymer (I) dispersion and an aqueous dispersion of a reaction product of N2H4 with acrylamide-Me acrylate-Bu acrylate copolymer (NHHH2-CO + epoxy group equivalent ratio 0.8:1) had good adhesion and fouling and blocking resistance.
 IT 74521-17-8, 2-Ethylhexyl acrylate-glycidyl
 methacrylate-methacrylic acid-methyl methacrylate copolymer
 126142-67-4, Diacetone acrylamide-2-ethylhexyl
 acrylate-glycidyl methacrylate-methacrylic acid-methyl
 methacrylate copolymer
 RL: USES (Uses)
 (latex coatings, resistant to blocking and fouling)

10/537,467-310163-EIC SEARCH

RN 74521-17-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl
2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

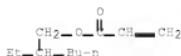
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 103-11-7
CMF C11 H20 Q2



CM 3

CRN 80-62-6
CMF C5 H8 Q2



CM 4

CRN 79-41-4
CMF C4 H6 02

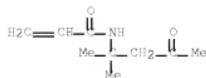


RN 126142-67-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl
 2-propenoate, methyl 2-methyl-2-propenoate and oxiranymethyl
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

10/537,467-310163-EIC SEARCH

CRN 2873-97-4
 CMF C9 H15 N O2



CM 2

CRN 106-91-2
 CMF C7 H10 O3



CM 3

CRN 103-11-7
 CMF C11 H20 O2



CM 4

CRN 80-62-6
 CMF C5 H8 O2



CM 5

CRN 79-41-4
 CMF C4 H6 O2



IC ICM C08G059-40
 ICS C08G059-20
 ICA C09D003-58; C09J003-16
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 IT 302-01-2D, Hydrazine, reaction products with acrylic polymers
 74521-17-8, 2-Ethylhexyl acrylate-glycidyl
 methacrylate-methacrylic acid-methyl methacrylate copolymer
 104357-51-9D, Ethyl acrylate-2-hydroxyethyl acrylate-methyl
 acrylate copolymer, reaction products with hydrazine
 123399-92-8D, Acrylamide-butyl acrylate-methyl acrylate copolymer,
 reaction products with hydrazine 126142-66-3, Acrylamide-butyl
 acrylate-glycidyl methacrylate-methyl methacrylate-styrene
 copolymer 126142-67-4, Diacetone
 acrylamide-2-ethylhexyl acrylate-glycidyl methacrylate-methacrylic
 acid-methyl methacrylate copolymer
 RL: USES (Uses)
 (latex coatings, resistant to blocking and fouling)

L77 ANSWER 26 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1989:596920 HCPLUS Full-text
 DOCUMENT NUMBER: 111:196920
 ORIGINAL REFERENCE NO.: 111:32733a,32736a
 TITLE: Cement- or alkaline earth metal
 hydroxide-containing antifouling coating
 compositions
 INVENTOR(S): Kato, Naoyuki
 PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 01108275	A	19890425	JP 1987-264967	
				1987
				1020
			<--	
PRIORITY APPLN. INFO.:			JP 1987-264967	
				1987
				1020
			<--	

ED Entered STN: 25 Nov 1989
 AB The coatings contain 100 parts anionic polymer aqueous dispersions, 5-20 parts R13R2N+
 X- (I; R1 = Me, Et; R2 = C8-18 alkyl; X = Cl) cationic surfactants, and 20-400
 parts cement or water-insol. alkaline earth hydroxides. A composition of H2O 100,
 Ca(OH)2 20, Liponox NCJ (polyoxyethylene alkyl ether) 15, Arquad S 50 (I, R1 = Me, R2 =
 C16-18 aliphatic hydrocarbyl, X = Cl) 15, and acrylamide-acrylic acid-Bu acrylate-Me
 methacrylate copolymer ammonium salt (with [CO2H] 2.78 + 10-2 mol/100 g) 100 parts
 showed good storage stability (50°, 3 mo), adhesion to nylon fish nets, and antifouling
 effectiveness (.apprx.4 mo).
 IT 118037-58-4, Acrylamide-acrylic acid-butyl
 acrylate-methyl methacrylate copolymer ammonium salt
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)
 (antifouling coatings, containing cationic surfactants and cement
 or alkaline earth metal hydroxides, storage-stable)
 RN 118037-58-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
 2-propenoate, 2-propenamide and 2-propenoic acid, ammonium salt
 (CA INDEX NAME)

10/537,467-310163-EIC SEARCH

CM 1

CRN 34447-72-8
 CMF (C₇ H₁₂ O₂ . C₅ H₈ O₂ . C₃ H₅ N O . C₃ H₄ O₂)_x
 CCI PMS

CM 2

CRN 141-32-2
 CMF C₇ H₁₂ O₂



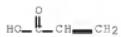
CM 3

CRN 80-62-6
 CMF C₅ H₈ O₂



CM 4

CRN 79-10-7
 CMF C₃ H₄ O₂



CM 5

CRN 79-06-1
 CMF C₃ H₅ N O



IC ICM C09D005-08
 ICS A01N025-24; A01N033-12
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5, 46, 58
 IT 118037-58-4, Acrylamide-acrylic acid-butyl
 acrylate-methyl methacrylate copolymer ammonium salt
 RL: PRP (Properties); TEM (Technical or engineered material use);
 USES (Uses)

10/537,467-310163-EIC SEARCH

(antifouling coatings, containing cationic surfactants and cement or alkaline earth metal hydroxides, storage-stable)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L77 ANSWER 27 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1989:194794 HCAPLUS Full-text
 DOCUMENT NUMBER: 110:194794
 ORIGINAL REFERENCE NO.: 110:32341a,32344a
 TITLE: Antimicrobial coatings containing cationic surfactants and 3-methyl-4-chlorophenol
 INVENTOR(S): Kato, Naoyuki
 PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 01006071	A	19890110	JP 1987-161992	
				1987
				0629
<--				
PRIORITY APPLN. INFO.:			JP 1987-161992	
				1987
				0629
<--				

OTHER SOURCE(S): MARPAT 110:194794

ED Entered STN: 26 May 1989

AB The coatings comprise anionic resin (containing CO₂H 1.4 + 10-3-1.8 + 10-2 mol; in aqueous dispersions) 100, cationic surfactants R₂R₁N⁺ X- (I; R₁ = Me, Et; R₂ = C₈-18 alkyl; X = halogen) 5-20, and 3-methyl-4-chlorophenol (II) or 2-phenylphenol 0.8-20%. A composition of II 2.5, Aqual S 50 (I, R₁ = Me, R₂ = 10:10:35:45% hexadecyl-octadecyl-octadecenyl-octadecadienyl; X = Cl) 15, Liponox NCJ (polyoxyethylene alkyl ether) 15, and ammonium salt of acrylic acid-acrylamide-Eu acrylate-Me methacrylate copolymer (CO₂H 2.78 + 10-2 mol/100 g) 100 parts showed good storage stability and microbe resistance .apprx.4 mo. when coated on a fishnet.

IT 118037-58-4, Acrylamide-acrylic acidbutyl acrylate-methyl methacrylate copolymer ammonium salt

RL: USES (Uses)
 (emulsions, containing cationic surfactants and methylchlorophenol, antimicrobial)

RN 118037-58-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenamide and 2-propenoic acid, ammonium salt (CA INDEX NAME)

CM 1

CRN 34447-72-8
 CMF (C₇ H₁₂ O₂ . C₅ H₈ O₂ . C₃ H₅ N O . C₃ H₄ O₂)_x
 CCI PMS

CM 2

CRN 141-32-2
 CMF C₇ H₁₂ O₂



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

IC ICM C09D005-14
ICS A01N033-12
ICI A01N033-12, A01N031-08
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 5
IT 118037-58-4, Acrylamide-acrylic acidbutyl acrylate-methyl methacrylate copolymer ammonium salt
RL: USES (Uses)
(emulsions, containing cationic surfactants and methylchlorophenol, antimicrobial)

L77 ANSWER 28 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1989:9769 HCPLUS Full-text
DOCUMENT NUMBER: 110:9769
ORIGINAL REFERENCE NO.: 110:1757a,1760a
TITLE: Enzyme-containing antifouling emulsion coating compositions
INVENTOR(S): Kato, Naoyuki
PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

10/537,467-310163-EIC SEARCH

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63202677	A	19880822	JP 1987-36356	
				1987
				0219
<--				
PRIORITY APPLN. INFO.:			JP 1987-36356	
				1987
				0219
<--				

OTHER SOURCE(S): MARPAT 110:9769

ED Entered STN: 06 Jan 1989

AB Title coatings which effectively prevent the accumulation of sea- and freshwater plant and animal species for ≥ 100 days without the use of organotin compds. are formed by applying aqueous compns. of emulsion polymers 100, cationic surfactants RR1R2R3N⁺ X⁻ (R = C₈-18 alkyl; R1-3 = Me, Et; X = Cl, Br, I) 5-20, cellulases, proteases, and/or cell wall-lytic enzymes 0.1-10, C₃-5 alkanedioic and/or C₅-10 hydroxycarboxylic acids 0-7, and plasticizers 0-15 parts. Me methacrylate, Bu acrylate, acrylic acid, and acrylamide were polymerized in H₂O containing emulsifiers and K2S2O8, then neutralized with NH₃, and the resulting polymer 100, Arquad S 50 (C₁₆-18 hydrocarbyltrimethylammonium chloride) 15, Liponox NCJ (nonionic surfactant) 15, cellulase 0.5, citric acid 0.2, di-Bu phthalate 10, and H₂O 100 parts were mixed to form an emulsion with good storage stability. Nylon fish-nets were coated with this composition (20% pickup), dried 3 days at ambient temperature, and immersed in the sea, and no slime formation was observed after 4 mo although uncoated nets were fouled after 2 wk. A piece of the coated nylon net placed inside a tank effectively killed aquatic plants when the tank was drained and refilled with freshwater containing plants once/wk for 12 wk.

IT 118037-58-4, Acrylamide-acrylic acidbutyl acrylate-methyl methacrylate copolymer ammonium salt

RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, emulsion, containing cationic surfactants and enzymes, for aquatic fouling control)

RN 118037-58-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenamide and 2-propenoic acid, ammonium salt
(CA INDEX NAME)

CM 1

CRN 34447-72-8

CMF (C₇ H₁₂ O₂ . C₅ H₈ O₂ . C₃ H₅ N O . C₃ H₄ O₂)_x
CCI PMS

CM 2

CRN 141-32-2

CMF C₇ H₁₂ O₂

CM 3

CRN 80-62-6

CMF C₅ H₈ O₂



CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

- IC ICM C09D005-14
 ICS A01N063-00; C09D007-12
- ICI A01N063-00, A01N033-12, A01N037-04, A01N037-36
 CC 42-5 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5, 7, 46
- ST antifouling coating cationic surfactant enzyme; slimicide
 quaternary ammonium antifouling coating; emulsion paint
 aquatic fouling prevention; cellulase antifouling coating;
 protease antifouling coating; acrylic antifouling coating;
 acrylamide copolymer antifouling coating; methacrylate copolymer
 antifouling coating; Arguard antifouling coating; diacid
 antifouling coating; hydroxy carboxylic acid antifouling coating;
 citric acid antifouling coating
- IT Herbicides
 (aqueous, controlled-release, emulsion polymer
 coatings, containing cationic surfactants and enzymes)
- IT Alcohols, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (carboxy, coatings, emulsion, containing cationic
 surfactants and enzymes, for aquatic fouling control)
- IT Carboxylic acids, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (di-, coatings, emulsion, containing cationic surfactants
 and enzymes, for aquatic fouling control)
- IT Carboxylic acids, uses and miscellaneous
 RL: TEM (Technical or engineered material use); USES (Uses)
 (hydroxy, coatings, emulsion, containing cationic
 surfactants and enzymes, for aquatic fouling control)
- IT 77-92-9, uses and miscellaneous 87-69-4, uses and miscellaneous
 526-95-4, D-Gluconic acid 6915-15-7 118037-58-4,
 Acrylamide-acrylic acidbutyl acrylate/methyl methacrylate copolymer
 ammonium salt
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, emulsion, containing cationic surfactants and

10/537,467-310163-EIC SEARCH

enzymes, for aquatic fouling control)
 OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE
 THIS RECORD (4 CITINGS)

L77 ANSWER 29 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1988:494897 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:94897
 ORIGINAL REFERENCE NO.: 109:15831a,15834a
 TITLE: Storage-stable aqueous
 emulsions for antifouling coatings
 INVENTOR(S): Kato, Naoyuki
 PATENT ASSIGNEE(S): Mitsubishi Yuka Badische Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
JP 63081177	A	19880412	JP 1986-226514	
				1986
				0925
<--				
PRIORITY APPLN. INFO.:		JP 1986-226514		
		1986		
		0925		
<--				

ED Entered STN: 17 Sep 1988
 AB Antifouling coatings contain 100 parts anionic emulsions prepared from 100 parts mixture of unsatd. acids 0.1-1.3, C₂-8 alkyl acrylates 40-55, Me methacrylate (I), styrene or acrylonitrile 30-55, and N-phenylmaleimide, N-methylolacrylamide, acrylamide (II), methacrylamide, or 2-hydroxyalkylacrylamide 1-10%, 1-5 parts anionic emulsifiers, and 0-5 parts nonionic emulsifiers, 5-20 parts cationic surfactants R1NR23+ X- (R1 = C₈-18 alkyl; R2 = Me, Et; X = Cl, Br, I), and 0-15 parts plasticizers. Mixing 100 parts emulsion (prepared from I 195, Bu acrylate 189, acrylic acid 8, II 8, 20% polyoxyethylene p-nonylphenol ether (III) 20, and 35% III Na sulfate 5 parts) with di-Bu phthalate 5, H₂O 100 and 50% Arguard 5-50 (C₁₆-18-alkyltrimethylammonium chloride) 8 parts gave a composition with good storage stability.
 IT 34447-72-8 38808-37-6, Acrylamidebutyl
 acrylate-methacrylic acidmethyl methacrylate copolymer
 116159-92-3 116159-93-4 116159-94-5
 RL: USES (Uses)
 (antifouling coating emulsions, storage-stable)
 RN 34447-72-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
 2-propenoate, 2-propenamide and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

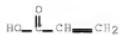
CM 2

CRN 80-62-6

CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2

CM 4

CRN 79-06-1
CMF C3 H5 N ORN 38808-37-6 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
methyl 2-methyl-2-propenoate and 2-propenamide (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-41-4
CMF C4 H6 O2

CM 4

CRN 79-06-1
CMF C3 H5 N O

RN 116159-92-3 HCPLUS
 CN Butanedioic acid, 2-methylene-, polymer with butyl 2-propenoate,
 methyl 2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid
 (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 97-65-4
CMF C5 H6 O4

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

CM 5

CRN 79-06-1
CMF C3 H5 N O

RN 116159-93-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 2-hydroxypropyl 2-propenoate, methyl 2-methyl-2-propenoate and
 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 999-61-1
CMF C6 H10 O3

CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

RN 116159-94-5 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
 2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 2-propenoic acid
 (9CI) (CA INDEX NAME)

CM 1

CRN 941-69-5
CMF C10 H7 N O2

CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

IC ICM C09D005-08

ICS C09D003-80

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 5

ST antifouling coating emulsion; quaternary ammonium antifouling coating; acrylic acid copolymer coating; acrylate copolymer coating antifouling; methacrylate copolymer coating antifouling; ship hull antifouling coating

IT Plasticizers
(di-Bu phthalate, for emulsion antifouling coatings)IT Emulsifying agents
(anionic, in antifouling emulsion coating manufacture)IT Coating materials
(antifouling, acrylic polymer emulsions-quaternary ammonium salts, storage-stable)IT Fouling control agents
(coatings, acrylic polymer emulsions-quaternary ammonium salts, storage-stable)IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(halides, in antifouling coating emulsions)IT Emulsifying agents
(nonionic, in antifouling emulsion coating manufacture)IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(trimethylsoya alkyl, chlorides, in antifouling coating emulsions)IT 34447-72-8 38808-37-6, Acrylamidebutyl acrylate-methacrylic acidmethyl methacrylate copolymer
116159-92-3 116159-93-4 116159-94-5
RL: USES (Uses)
(antifouling coating emulsions, storage-stable)IT 26027-38-3 31631-25-1
RL: USES (Uses)
(emulsifiers, in antifouling emulsion coating manufacture)IT 84-74-2, DBP
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, for antifouling emulsion coating)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE

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THIS RECORD (1 CITINGS)

L77 ANSWER 30 OF 48 HCPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1989:90645 HCPLUS Full-text
 DOCUMENT NUMBER: 110:90645
 ORIGINAL REFERENCE NO.: 110:14889a,14892a
 TITLE: Pesticidal formulations comprising a acrylic
 polymer dispersion agent
 INVENTOR(S): Tadros, Tharwat Fouad
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
 SOURCE: Eur. Pat. Appl., 16 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 289356	A2	19881102	EP 1988-303955	1988 0429
			<--	
EP 289356	A3	19900314		
EP 289356	B1	19930616		
US 5139773	A	19920818	US 1988-186437	1988 0426
			<--	
DK 8802353	A	19881030	DK 1988-2353	1988 0428
			<--	
DK 175268	B1	20040802		
JP 01117802	A	19890510	JP 1988-104353	1988 0428
			<--	
JP 2858753	B2	19990217		
AU 8815340	A	19881103	AU 1988-15340	1988 0429
			<--	
AU 608600	B2	19910411		
ZA 8803090	A	19881228	ZA 1988-3090	1988 0429
			<--	
AT 90507	T	19930715	AT 1988-303955	1988 0429
			<--	
CA 1326631	C	19940201	CA 1988-565607	1988 0429
			<--	
ES 2054802	T3	19940816	ES 1988-303955	1988 0429
			<--	
PRIORITY APPLN. INFO.:			GB 1987-10105	A
				1987 0429
			<--	
			EP 1988-303955	A

1988
0429

<--

ED Entered STN: 17 Mar 1989

AB A pesticidal formulation comprises a mixture of an active ingredient formulated as an emulsion and active ingredient(s) formulated as suspension. A block of graft copolymer dispersing agent is present, comprising ≥1 component of mol. weight ≥250, solvatable in the aqueous medium and another component of mol. weight ≥500 having a min. degree of hydrophobicity. The weight ratio between the components is 10:1 to 1:2. The formulation is prepared by forming a millbase by milling pesticide(s) with water and surfactant. The millbase is stirred into an emulsion containing pesticide(s), surfactant and, optionally, oil base, emulsified into water containing the dispersing agent, and optionally containing urea, pre-swelled gel and bactericide. A solution of 70 g propiconazole was milled with 5.6 g Morwet D425 to give a millbase, which was stirred into an emulsion, made of 70 g propiconazole, 60 g Span 80 at 40 g Tween 40 in xylene, emulsified in an aqueous solution of 20 polymeric surfactant H190/396 (acrylic polymer) 135 g urea, and 10 g Goshenol GL05. The amount of water was such as to give 1 L formulation.

IT 119087-88-6, H 190/396

RL: BIOL (Biological study)
(dispersing agent, for pesticide formulations)

RN 119087-88-6 HCPLUS

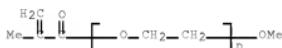
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
α-(2-methyl-1-oxo-2-propenyl)-α-methoxypoly(oxy-1,2-
ethanediyl) and 2-propenoic acid, graft (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C₂ H₄ O)n C₅ H₈ O₂

CCI PMS



CM 2

CRN 80-62-6

CMF C₅ H₈ O₂

CM 3

CRN 79-10-7

CMF C₃ H₄ O₂

IC ICM A01N025-04
 ICS A01N047-38; A01N043-40; A01N043-84
 ICI A01N047-38, A01N047-18, A01N043-653, A01N043-50, A01N043-40;
 A01N043-40, A01N037-18; A01N043-84, A01N043-653, A01N043-40,
 A01N037-34
 CC 5-6 (Agrochemical Bioregulators)
 ST dispersing agent polycrylic polymer formulation
 IT Dispersing agents
 (acrylic graft copolymer, for pesticide formulations)
 IT Acrylic polymers, biological studies
 RL: BIOL (Biological study)
 (dispersing agents, for polymer formulations)
 IT 119587-88-5, H 190/396
 RL: BIOL (Biological study)
 (dispersing agent, for pesticide formulations)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE
 THIS RECORD (2 CITINGS)

L77 ANSWER 31 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1987:178185 HCAPLUS Full-text
 DOCUMENT NUMBER: 1061:178185
 ORIGINAL REFERENCE NO.: 106:28921a,28924a
 TITLE: Polymeric particles
 INVENTOR(S): Redlich, George Harvey; Novak, Ronald William
 PATENT ASSIGNEE(S): Rohm and Haas Co., USA
 SOURCE: Eur. Pat. Appl., 43 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 203724	A2	19861203	EP 1986-303180	1986 0428 ---
EP 203724	A3	19890111		
EP 203724	B1	19911009		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4677003	A	19870630	US 1985-728992	1985 0430 ---
CA 1285092	C	19910618	CA 1986-506801	1986 0416 ---
AU 8656516	A	19861106	AU 1986-56516	1986 0423 ---
AU 585974	B2	19890629		
IL 78606	A	19900429	IL 1986-78606	1986 0423 ---
BR 8601895	A	19861230	BR 1986-1895	1986 0428 ---
AT 68190	T	19911015	AT 1986-303180	1986 0428

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CN 86103126	A	19861029	CN 1986-103126	<-- 1986 0430
<--				
CN 1017339	B	19920708		
JP 61293213	A	19861224	JP 1986-98430	1986 0430
<--				
JP 07042340	B	19950510		
US 4985064	A	19910115	US 1986-942312	1986 1216
<--				
CN 1041116	A	19900411	CN 1989-108103	1989 1018
<--				
CN 1023195	C	19931222		
US 5225279	A	19930706	US 1990-606224	1990 1031
<--				
PRIORITY APPLN. INFO.:				
US 1985-728992 A 1985 0430				
<--				
EP 1986-303180 A 1986 0428				
<--				
US 1986-942312 A1 1986 1216				
<--				

ED Entered STN: 29 May 1987

AB An aqueous dispersion of water insol. core-shell particles, useful in coating, herbicidal, and biocidal compns., is prepared by emulsifying a mixture containing hydrophilic solvent (and/or organic target material), hydrophilic solvent, monoethylenically unsatd. monomers (2-4% being α,β -unsatd. carboxylic acid), surfactant, stabilizer, and initiator, polymerizing by heat, neutralizing the acid group with base, such as NH₃, and, optionally, adding an addnl. monomer which can be polymerized on or in the core-shell particles. Thus, 100 parts of a mixture containing mineral spirits 55, pentanol 30, and Skane M-8 biocide 15 parts was added to 367 parts water and emulsified with a monomer mixture (containing Bu acrylate 10, Me methacrylate 88.5, and methacrylic acid 2.5 parts) 268, dioctyl phthalate 11, Monowet MO-70E surfactant 11, and lauroyl peroxide 9.3 parts. Then, 250 parts of this emulsion and 62.5 parts water was heated under N at 85-88° for 60 min, neutralized with 7.8 parts 5.6% aqueous NH₃, and heated for addnl. 30 min at 85-88° to provide core-shell encapsulated biocide particles. Water-thinned Rhoplex AC-64 paint was spiked with the particles to 2g-active compound/1200 g paint to give a sample having 100% biocide remaining after 7 days at 60°. vs. 0 for a similar paint containing unencapsulated biocide.

IT 55989-05-4P

RL: PREP (Preparation)
(preparation of, as core-shell microcapsules, in the encapsulation
of Goal herbicide)

RN 55989-05-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and
methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)

CM 1

CRN 25133-97-5

CMF (C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 140-88-5
CMF C5 H8 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

IT 107935-25-1P

RL: PREP (Preparation)
(preparation of, as core-shell microcapsules, in the encapsulation
of Me hexanoate)

RN 107935-25-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl
2-methyl-2-propenoate, and 2-propenyl 2-methyl-2-propenoate,
ammonium salt (9CI) (CA INDEX NAME)

CCI 1

CRN 107935-24-0
CMF (C7 H10 O2 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 2

CRN 96-05-9
CMF C7 H10 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2IT 42884-82-2P 107935-18-2P
107935-19-3P 107935-21-7P
107935-23-9P 107935-27-3P
107935-28-4PRL: PREP (Preparation)
(preparation of, as core/shell microcapsules, for herbicide- or
biocide-containing coatings)RN 42884-82-2 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and
methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)

CM 1

CRN 25035-69-2
CMF (C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

RN 107935-18-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 methyl 2-methyl-2-propenoate, 2-propenenitrile and 2-propenyl
 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 107935-17-1
 CMF (C7 H12 O2 . C7 H10 O2 . C5 H8 O2 . C4 H6 O2 . C3 H3 N)x
 CCI PMS

CM 2

CRN 141-32-2
 CMF C7 H12 O2

CM 3

CRN 107-13-1
 CMF C3 H3 N

CM 4

CRN 96-05-9
 CMF C7 H10 O2

CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

RN 107935-19-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 ethenylbenzene, methyl 2-methyl-2-propenoate and 2-propenyl
 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 25323-66-4
 CMF (C8 H8 . C7 H12 O2 . C7 H10 O2 . C5 H8 O2 . C4 H6 O2)x
 CCI PMS

CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 96-05-9
CMF C7 H10 O2



CM 5
CRN 80-62-6
CMF C5 H8 O2



CM 6
CRN 79-41-4
CMF C4 H6 O2



RN 107935-21-7 HCPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, ethyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-propenyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 107935-20-6
CMF (C8 H8 . C7 H10 O2 . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 2

CRN 140-88-5
CMF C5 H8 O2



CM 3
CRN 100-42-5
CMF C8 H8

H2C=CH-Ph

CM 4

CRN 96-05-9
CMF C7 H10 O2

CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

RN 107935-23-9 HCPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate and 2-propenyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 107935-22-8
CMF (C8 H8 . C7 H10 O2 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 2

CRN 100-42-5
CMF C8 H8H2C=CH-Ph

CM 3

CRN 96-05-9
CMF C7 H10 O2

CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-41-4
CMF C4 H6 O2

RN 107935-27-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 ethyl 2-propenoate, methyl 2-methyl-2-propenoate, and 2-propenyl
 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 107935-26-2
 CMF (C7 H12 O2 . C7 H10 O2 . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x
 CCI PMS

CM 2

CRN 141-32-2
 CMF C7 H12 O2

CM 3

CRN 140-88-5
CMF C5 H8 O2

CM 4

CRN 96-05-9
CMF C7 H10 O2

CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

RN 107935-28-4 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 methyl 2-methyl-2-propenoate, and 2-propenyl
 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 92124-73-7
 CMF (C7 H12 O2 . C7 H10 O2 . C5 H8 O2 . C4 H6 O2)x
 CCI PMS

CM 2

CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 96-05-9
CMF C7 H10 O2



CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

CRN 79-41-4
CMF C4 H6 O2



IC ICM C08F002-00
ICS C08F291-00; C08J003-12

CC 42-5 (Coatings, Inks, and Related Products)
Section cross-reference(s): 5, 37

IT 55989-05-4P

RL: PREP (Preparation)
(preparation of, as core-shell microcapsules, in the encapsulation
of Goal herbicide)

IT 107935-25-1P

RL: PREP (Preparation)
(preparation of, as core-shell microcapsules, in the encapsulation
of Me hexanoate)

IT 42884-82-2P 107935-18-2P
107935-19-3P 107935-21-7P
107935-23-9P 107935-27-3P
107935-28-4P

RL: PREP (Preparation)
 (preparation of, as core/shell microcapsules, for herbicide- or
 biocide-containing coatings)
 OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE
 THIS RECORD (25 CITINGS)

L77 ANSWER 32 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1987:121472 HCAPLUS Full-text
 DOCUMENT NUMBER: 106:121472
 ORIGINAL REFERENCE NO.: 106:19845a,19848a
 TITLE: High-build antifouling coatings for underwater
 structures
 INVENTOR(S): Kanda, Kazunori; Mizuguchi, Ryuzo
 PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 28 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 200433	A2	19861105	EP 1986-302912	1986 0418
			<--	
EP 200433	A3	19880921		
EP 200433	B1	19920122		
R: DE, FR, GB, NL, SE				
NO 8601489	A	19861020	NO 1986-1489	1986 0416
			<--	
NO 175822	B	19940905		
NO 175822	C	19941214		
DK 8601758	A	19861019	DK 1986-1758	1986 0417
			<--	
BR 8601726	A	19861216	BR 1986-1726	1986 0417
			<--	
JP 62030164	A	19870209	JP 1986-90829	1986 0418
			<--	
JP 04065108	B	19921019		
US 4769398	A	19880906	US 1986-853842	1986 0418
			<--	
PRIORITY APPLN. INFO.:			JP 1985-83439	A
				1985 0418
			<--	

ED Entered STN: 17 Apr 1987
 AB Self-polishing title coatings comprise film-forming polymers, solvents, and antifouling agent-containing crosslinked polymer microparticles. A mixture containing tributyltin methacrylate 5, triphenyltin hydroxide 7.5, Me methacrylate 15, styrene 5, ethylene glycol dimethacrylate 20, acrylonitrile 5, and 2,2'-azobis(2,4-dimethylvaleronitrile) 1 part was added dropwise over 1 h to a poly(vinyl alc.) emulsion and heated to 70° for 5 h to give an aqueous suspension of microparticles of mean diameter 25 μ. WW rosin 75, VYHH (PVC resin) 75, MIBK 50, and xylene 100 parts were mixed to form a varnish, 100

10/537,467-310163-EIC SEARCH

parts of which was mixed with the microparticles 30, xylene 20, and Cu₂O 20 parts, and applied to a sandblasted steel plate precoated with anticorrosive paint. After immersion in the sea for 6 mo the coated plate showed no fouling, but one coated with a similar composition without the microparticles was covered with marine organisms over 15% of its surface.

IT 52522-03-9, Butyl acrylate-hydroxypropyl acrylate-methyl methacrylate-styrene copolymer 107192-06-3

RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, containing marine antifouling agents in crosslinked polymer microparticles, self-polishing)

RN 52522-03-9 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 1,2-propanediol mono-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2



CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 25584-83-2
CMF C6 H10 O3
CCI IDS

CM 5

CRN 79-10-7
CMF C3 H4 O2



CM 6

CRN 57-55-6
CMF C3 H8 O2

RN 107192-06-3 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 ethenylbenzene, methyl 2-propenoate, 1,2-propanediol
 mono-2-propenoate and tributyl[(2-methyl-1-oxo-2-
 propenyl)oxy]stannane (9CI) (CA INDEX NAME)

CM 1

CRN 2155-70-6
CMF C16 H32 O2 Sn

CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 96-33-3
CMF C4 H6 O2

CM 4

CRN 80-62-6
CMF C5 H8 O2



CM 5

CRN 25584-83-2
CMF C6 H10 O3
CCI IDS

CM 6

CRN 79-10-7
CMF C3 H4 O2



CM 7

CRN 57-55-6
CMF C3 H8 O2



IC ICM C09D005-14
CC 42-5 (Coatings, Inks, and Related Products)
Section cross-reference(s): 5, 61
IT 9002-85-1, Poly(vinylidene chloride) 9003-22-9, VYHH
26354-18-7, Methyl methacrylate-tributyltin methacrylate copolymer
52522-03-9, Butyl acrylate-hydroxypropyl acrylate-methyl
methacrylate-styrene copolymer 107192-06-3
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, containing marine antifouling agents in crosslinked
polymer microparticles, self-polishing)
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE
THIS RECORD (4 CITINGS)

L77 ANSWER 33 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:483743 HCAPLUS Full-text
DOCUMENT NUMBER: 99:83743
ORIGINAL REFERENCE NO.: 99:12861a, 12864a
TITLE: Aqueous agrochemical
suspension
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58072501	A	19830430	JP 1981-169451	
				1981 1024
			<--	
JP 63025594	B	19880526	JP 1981-169451	
PRIORITY APPLN. INFO.:				1981 1024
			<--	
ED	Entered STN: 12 May 1984			
AB	High concentration liquid agrochems. are formulated by suspending water-insol. or hardly water-soluble agrochems. in an ag. colloid solution (<0.1 μm) of copolymers. Thus, NAC [63-25-2] was suspended in a 25% colloid solution (0.05-0.01 μm) of Me metacrylate-Et acrylate-metacrylic acid copolymer [25133-97-5] (45:45:10) copolymer to 44.4%. The suspension was stable and readily diluted with water.			
IT	25133-97-5			
	RL: BIOL (Biological study) (pesticide emulsion containing)			
RN	25133-97-5 HCPLUS			
CN	2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)			
CM	1			
CRN	140-88-5			
CMF	C5 H8 O2			



CM 2

CRN 80-62-6
 CMF C5 H8 O2



CM 3

CRN 79-41-4
 CMF C4 H6 O2



IC A01NU25-04
 CC 5-6 (Agrochemical Bioregulators)
 ST pesticide emulsion stabilization copolymer
 IT Fungicides and Fungistats
 Herbicides
 Pesticides
 (copolymer emulsions)
 IT 63-25-2 80-33-1 87-41-2 94-74-6 97-53-0 101-05-3
 108-60-1 121-29-9 122-14-5 122-34-9 133-06-2 137-26-8
 333-41-5 575-36-0 709-98-8 2104-64-5 2425-10-7 2797-51-5
 17109-49-8 63036-91-9
 RL: BIOL (Biological study)
 (emulsion containing copolymers and)
 IT 9010-77-9 25133-97-5 31605-22-8
 RL: BIOL (Biological study)
 (pesticide emulsion containing)
 IT 9011-14-7
 RL: BIOL (Biological study)
 (polymers with rosin, pesticide emulsion containing)
 OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE
 THIS RECORD (4 CITINGS)

L77 ANSWER 34 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1984:47065 HCAPLUS Full-text
 DOCUMENT NUMBER: 100:47065
 ORIGINAL REFERENCE NO.: 100:7143a,7146a
 TITLE: Polymer-UV composition for reducing water loss
 by transpiration
 INVENTOR(S): Delong, Charles Frederick
 PATENT ASSIGNEE(S): Eripon, George Leonard, III, USA
 SOURCE: Pat. Specif. (Aust.), 21 pp.
 CODEN: ALXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AU 528251	B2	19830421	AU 1980-60281	1980 0709
				<--
AU 8060281	A	19800925	AU 1980-60281	1980 0709
				<--

PRIORITY APPLN. INFO.:
 ED Entered STN: 12 May 1984
 AB A composition for protecting plants from water loss due to transpiration and from
 damages from wind and cold contains an aqueous solution or dispersion of a hydrophilic
 acrylic polymer containing free carboxyl groups, a cross-linking agent for said
 polymer, and an UV-absorbing agent. Thus, a homogeneous dispersion containing water
 (120 L), a terpolymer methyl methacrylate-Et methacrylate-acrylic acid polymer (56-30-
 14%) [34306-73-5] (30 L), a cross-linking agent Epon 812 [31305-91-6] (3 L), and 2-
 ethoxyethyl p-methoxycinnamate [104-28-9] (80 mL) was sprayed on an ornamental pepper
 plant. The treated plant was unaffected by freezing conditions (15°F) for 6 h whereas
 the untreated control experienced drooping and freeze damage. Addnl., pesticides such
 as Sevin [63-25-2] and liquid fertilizers can be incorporated in the spray.
 IT 25133-97-5 34306-73-5
 RL: BIOL (Biological study)
 (antitranspirant composition containing, for plants)
 RN 25133-97-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and
 methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 34306-73-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl
 2-methyl-2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 97-63-2
CMF C6 H10 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

IC A01G007-06; C08L033-12; C08L033-08; C08J003-24; C08G081-02;
A01N003-00
CC 5-3 (Agrochemical Bioregulators)
IT 63-25-2 104-28-9 151-56-4, biological studies 1336-21-6
9002-98-6 9003-08-1 13236-02-7 24012-08-6 25068-38-6
25085-35-2 25133-97-5 31305-91-6
34306-73-5
RL: BIOL (Biological study)
(antitranspirant composition containing, for plants)

L77 ANSWER 35 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1980:463612 HCAPLUS Full-text
DOCUMENT NUMBER: 93:63612
ORIGINAL REFERENCE NO.: 93:10303a,10306a
TITLE: Plant growth inhibiting composition
INVENTOR(S): Delong, Charles Frederick; Erion, George
Leonard, III
PATENT ASSIGNEE(S): USA
SOURCE: Braz. Pedido PI, 27 pp.
CODEN: BPXXDX
DOCUMENT TYPE: Patent
LANGUAGE: Portuguese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 7707845	A	19790612	BR 1977-7845	1977 1025 -->
PRIORITY APPLN. INFO.:			BR 1977-7845	A 1977 1025 -->

ED Entered STN: 12 May 1984
 AB A composition containing an aqueous suspension of a hydrophilic acrylic polymer which is not water-soluble and a derivative of maleic hydrazide was capable of slowly releasing the growth inhibiting substance. Thus, it controls the excessive growth of plants during the rainy season. An aqueous suspension containing methyl methacrylate-Et methacrylate-acrylic acid copolymers [34306-73-5] and as active ingredient, 4,5-dibromomaleic hydrazide [27083-50-7], is given as an example.
 IT 27083-50-7
 RL: BIOL (Biological study)
 (controlled-release plant growth regulator containing acrylic polymers and)
 RN 27083-50-7 HCAPLUS
 CN 2-Propenoic acid, polymer with butyl 2-propenoate and methyl 2-propenoate (CA INDEX NAME)

10/537,467-310163-EIC SEARCH

CM 1

CRN 141-32-2
CMF C7 H12 O2

CM 2

CRN 96-33-3
CMF C4 H6 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

IT 25135-39-1 34306-73-5

RL: BIOL (Biological study)
(controlled-release plant growth regulators containing maleic
hydrazide and)

RN 25135-39-1 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl
2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-10-7
CMF C3 H4 O2RN 34306-73-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl
2-methyl-2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 97-63-2
CMF C6 H10 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2IC A01N005-00; A01N017-02
CC 5-3 (Agrochemicals)
IT 123-33-1 2797-52-6 15456-83-4 27083-50-7

10/537,467-310163-EIC SEARCH

RL: BIOL (Biological study)
 (controlled-release plant growth regulator containing acrylic polymers and)

IT 25085-35-2 25135-39-1 34306-73-5
 RL: BIOL (Biological study)
 (controlled-release plant growth regulators containing maleic hydrazide and)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L77 ANSWER 36 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1977:585995 HCAPLUS Full-text
 DOCUMENT NUMBER: 87:185995
 ORIGINAL REFERENCE NO.: 87:29381a, 29384a
 TITLE: Controlling allergens
 INVENTOR(S): Johnson, Charles E.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 4048369	A	19770913	US 1975-640206	
				1975
				1212
<--				
PRIORITY APPLN. INFO.:		US 1975-640206		
<--				

ED Entered STN: 12 May 1984
 AB Compns. for controlling allergens in fabrics by reducing the activity of pyrogllyphid mites and their debris contain aq. dispersions of hydrophobic, nonnutritive, flexible polymers with min. film-forming temperature <30° and glass temperature <20°. Thus, a 10% latex of 15:63:22 acrylic acid-ethyl acrylate-methyl methacrylate copolymer [25135-39-1], glass temperature 14°, min. film-forming temperature 14°, is sponged (10 g/ft²) on a mattress, giving mite control for 6-12 months.

IT 25133-97-5 25135-39-1
 RL: USES (Uses)
 (coatings, for mite control on fabrics)

RN 25133-97-5 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2



CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 25135-39-1 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl
 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5
CMF C5 H8 O2

CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-10-7
CMF C3 H4 O2

IC B05D007-24
 INCL 428262000

CC 39-6 (Textiles)
 Section cross-reference(s): 5, 42
 IT 25035-82-9 25085-35-2 25119-83-9 25133-97-5
 25135-39-1
 RL: USES (Uses)
 (coatings, for mite control on fabrics)
 OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE
 THIS RECORD (7 CITINGS)

L77 ANSWER 37 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1973:543533 HCAPLUS Full-text
 DOCUMENT NUMBER: 79:143533
 ORIGINAL REFERENCE NO.: 79:23261a,23264a
 TITLE: Granular pesticidal composition easily
 disintegratable in water
 INVENTOR(S): Nakai, Masahiro; Koito, Katsutoshi; Kajiwara,
 Hideyuki
 PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd.
 SOURCE: Jpn. Tokyo Koho, 4 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 48001501	B4	19730118	JP 1970-73582	
				1970 0821

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ED Entered STN: 12 May 1984
 AB Water-soluble or water-dispersible polymers containing unsatd. carboxylic acids or derivs. thereof as the monomer-unit were added to granular pesticide preps. to improve the disintegrating property and spreading property of granules. Acrylic acid polymer [9003-01-4], methacrylic acid polymer [25087-26-7], acrylic acid-methacrylic acid copolymer [25751-21-7], acrylic acid-Me acrylate copolymer [25302-81-2], acrylic acid-vinyl acetate copolymer [24980-58-3] and maleic acid-styrene copolymer [25300-64-5] were the polymers used. Thus, a mixture of 5% dimethoate [60-51-5], 5% white carbon, 30% bentonite, 57% talc. and 3% acrylic acid-methacrylic acid copolymer triethanolamine salt [43212-12-0] was granulated by a drum-granulator.

IT 25322-25-2
 RL: BIOL (Biological study)
 (in granular pesticide formulations)
 RN 25322-25-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 80-62-6
 CMF C5 H8 O2

CM 2

CRN 79-10-7

CMF C3 H4 O2



IC A01N
 CC 5-13 (Agrochemicals)
 IT 9003-01-4 24980-58-3 25087-26-7 25300-64-5
 25322-25-2 25751-21-7
 RL: BIOL (Biological study)
 (in granular pesticide formulations)

L77 ANSWER 38 OF 48 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1972:476812 HCAPLUS Full-text
 DOCUMENT NUMBER: 77:76812
 ORIGINAL REFERENCE NO.: 77:12669a,12672a
 TITLE: Copolymeric coating compositions for enhancing
 the germination of seeds
 INVENTOR(S): Graves, Thomas M.
 SOURCE: U.S., 2 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3598565	A	19710810	US 1968-748617	1968 0730 ---
US 3707807	A	19730102	US 1970-94559	1970 1202 ---
PRIORITY APPLN. INFO.:				US 1968-748617 A3 1968 0730 ---

ED Entered STN: 12 May 1984
 AB Seeds are treated with an aqueous copolymer emulsion which not only provides a protective coating, but also enhances germination rate and viability of the emerging seedling. The emulsion contains vinyl acetate-Nacrylic 25-2813 copolymer, Joncrys 85 [25322-25-2], and N-(trichloromethylthio)tetrahydrophthalimide [133-06-2].

IT 25322-25-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, containing (trichloromethylthio)tetrahydrophthalimide,
 on seeds, for improved germination)

RN 25322-25-2 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 80-62-6
 CMF C5 H8 O2



CM 2

CRN 79-10-7
CMF C3 H4 O2

IC A01N; A01C
 INCL 071077000
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 5
 IT 25322-25-2
 RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, containing (trichloromethylthio)tetrahydropthalimide,
 on seeds, for improved germination)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE
 THIS RECORD (2 CITINGS)

-> d 177 39-48 ibib ab hit ind

L77 ANSWER 39 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson
 Corporation on STN
 ACCESSION NUMBER: 2003:413988 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200300413988
 TITLE: Nanoprecipitation technique for the encapsulation
 of agrochemical active ingredients.
 AUTHOR(S): Boehm, A. L. [Reprint Author]; Martinon, I.;
 Zerrouk, R.; Rump, E.; Fessi, H.
 CORPORATE SOURCE: Laboratoire de Pharmacie Galénique, Faculté de
 Pharmacie, UMR 5007, 8 Avenue Rockefeller, 69373,
 Lyon Cedex 08, France
 SOURCE: Journal of Microencapsulation, (July-August
 2003) Vol. 20, No. 4, pp. 433-441. print.
 ISSN: 0265-2048 (ISSN print).
 DOCUMENT TYPE: Article
 LANGUAGE: English
 ENTRY DATE: Entered STN: 10 Sep 2003
 Last Updated on STN: 10 Sep 2003

AB In 1997, a research programme was initiated to assess the ability of nanospheres (NS) to improve the biodelivery of a new insecticide to plants. Stable polymeric NS, with a size near 135 nm and an encapsulation rate in the range of 3.5%, have been obtained using a nanoprecipitation method with Eudragit S100 polymer. Biological studies have been performed on cotton plants infested with aphid, to estimate the direct contact efficacy of NS formulations on the insects and the systemicity of the encapsulated active ingredient and its level of penetration through the plant, compared to a classical suspension used as a reference. Results indicate that NS formulations are not so good as the reference in terms of speed of action and sustained release. Nevertheless, NS formulation performed better than the reference to enhance the systemicity of the AI and improve its penetration through the plant. It is concluded that the NS do not provide a controlled release of AI but, due to their small size, they enhance the penetration in the plant compared to the classical suspension.

SO Journal of Microencapsulation, (July-August 2003) Vol. 20, No. 4, pp. 433-441. print.

ISSN: 0265-2048 (ISSN print).

AB In 1997, a research programme was initiated to assess the ability of nanospheres (NS) to improve the biodelivery of a new insecticide to plants. Stable polymeric NS, with a size near 135 nm and an encapsulation rate in the range of 3.5%, have been obtained using a nanoprecipitation method with Eudragit S100 polymer. Biological studies have been performed on cotton plants infested with aphid, to estimate the direct contact efficacy of NS formulations on the insects and the systemicity of the encapsulated active ingredient and its level of penetration through the plant, compared to a classical suspension used as a reference. Results indicate that NS formulations are not so good as the reference in terms of speed of action and sustained release. Nevertheless, NS formulation performed better than the reference to enhance the systemicity of the AI and improve its penetration through the plant. It is concluded that the NS do not provide a controlled release of AI but, due to their small size, they enhance the penetration in the plant compared to the classical suspension.

RN 25084-15-1 (Eudragit S100)

CC Pest control; general; pesticides and herbicides 54600

IT Major Concepts

Methods and Techniques; Pesticides

IT Chemicals & Biochemicals

Eudragit S100: polymer; insecticides

IT Methods & Equipment

encapsulation: laboratory techniques; nanoprecipitation:
laboratory techniques

ORGN Classifier

Malvaceae 26330

Super Taxa

Dicotyledones; Angiospermae; Spermatophyta; Plantae

Organism Name

cotton (common)

Taxa Notes

Angiosperms, Dicots, Plants, Spermatophytes, Vascular Plants

RN 25086-15-1 (Eudragit S100)

L77 ANSWER 40 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:384053 BIOSIS Full-text

DOCUMENT NUMBER: PREV200300384053

TITLE: Physicochemical properties to determine the buoyancy of hollow microspheres (microballoons) prepared by the emulsion solvent diffusion method.

AUTHOR(S): Sato, Yasunori [Reprint Author]; Kawashima, Yoshiaki; Takeuchi, Hiromu; Yamamoto, Hiromitsu

CORPORATE SOURCE: Teikoku Hormone Mfg. Co., Ltd., 1604, Shimosakunobe, Tatsukatsu, Kawasaki, Kanagawa, 213-8522, Japan

satou-y@kw.teikoku-hormone.co.jp

SOURCE: European Journal of Pharmaceutics and Biopharmaceutics, (May 2003) Vol. 55, No. 3, pp. 297-304. print.

ISSN: 0939-6411 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 20 Aug 2003

Last Updated on STN: 20 Aug 2003

AB Hollow microspheres (microballoons) floatable on JPXIII Number 1 solution were developed as a dosage form capable of floating in the stomach. Hollow microspheres were prepared by the emulsion solvent diffusion method using enteric acrylic polymers with drug in a mixture of dichloromethane and ethanol. It was found that preparation temperature determined the formation of cavity inside the microsphere and the surface smoothness, determining the floatability and the drug release rate of the microballoon. The correlation between the buoyancy of microballoons and their physical properties, e.g. apparent density and roundness of microballoons were elucidated. The drug loading efficiency of microballoons with various types of drug was investigated and correlated to the distribution coefficient of drug between dichloromethane and water. The optimum loading amount of riboflavin in the microballoon was found to impart ideal floatable properties to the microballoons. On the other hand, little entrapment was observed for

aspirin due to the low distribution coefficient; however, entrapment improved to some extent upon reduction of the pH of the process.

TI Physicochemical properties to determine the buoyancy of hollow microspheres (microballoons) prepared by the emulsion solvent diffusion method.

SO European Journal of Pharmaceutics and Biopharmaceutics, (May 2003) Vol. 55, No. 3, pp. 297-304. print.
ISSN: 0939-6411 (ISSN print).

AB Hollow microspheres (microballoons) floatable on JPXIII Number 1 solution were developed as a dosage form capable of floating in the stomach. Hollow microspheres were prepared by the emulsion solvent diffusion method using enteric acrylic polymers with drug in a mixture of dichloromethane and ethanol. It was found that preparation temperature determined the formation of cavity inside the microsphere and the surface smoothness, determining the floatability and the drug release rate of the microballoon. The correlation between the buoyancy of microballoons and their physical properties, e.g. apparent density and roundness of microballoons were elucidated. The drug loading efficiency of microballoons with various types of drug was investigated and correlated to the distribution coefficient of drug between dichloromethane and water. The optimum loading amount of riboflavin in the microballoon was found to impart ideal floatable properties to the microballoons. On the other hand, little entrapment was observed for aspirin due to the low distribution coefficient; however, entrapment improved to some extent upon reduction of the pH of the process.

IT Methods & Equipment
 emulsion solvent diffusion method: laboratory techniques; floating controlled drug delivery system: clinical techniques; hollow microsphere [microballoon]: drug delivery device

IT Miscellaneous Descriptors
 drug release rate; microsphere buoyancy; microsphere porosity

RN 25086-15-1 (Eudragit S100)
 25086-15-1 (methyl acid)
 83-88-5 (riboflavin)

CC Biochemistry studies - Vitamins 10063
 Pathology - Therapy 12512
 Pharmacology - General 22002

IT Major Concepts
 Methods and Techniques; Pharmaceuticals (Pharmacology)

IT Chemicals & Biochemicals
 Eudragit S100 [methyl acid]; riboflavin

IT Methods & Equipment
 emulsion solvent diffusion method: laboratory techniques; floating controlled drug delivery system: clinical techniques; hollow microsphere [microballoon]: drug delivery device

IT Miscellaneous Descriptors
 drug release rate; microsphere buoyancy; microsphere porosity

RN 25086-15-1 (Eudragit S100)
 25086-15-1 (methyl acid)
 83-88-5 (riboflavin)

L77 ANSWER 41 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:551904 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200300554870
 TITLE: Preparation of polymeric nanoparticles containing corticosteroid by a novel aerosol flow reactor method.
 AUTHOR(S): Eerikainen, Hannele; Kauppinen, Esko I. [Reprint Author]
 CORPORATE SOURCE: Aerosol Technology Group, VTT Processes, FIN-02044, P.O. Box 1602, Espoo, Finland
 esko.kauppinen@vtt.fi
 SOURCE: International Journal of Pharmaceutics (Kidlington), (16 September 2003) Vol. 263, No. 1-2, pp. 69-83. print.
 ISSN: 0378-5173 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English
 ENTRY DATE: Entered STN: 26 Nov 2003
 Last Updated on STN: 26 Nov 2003

AB Polymeric drug-containing nanoparticles were prepared using a novel aerosol flow reactor method. The polymeric drug-containing nanoparticles prepared consist of a poorly water soluble corticosteroid, beclomethasone dipropionate, and polymeric materials Eudragit E 100 or Eudragit L 100. The novel method used in this study allows synthesis of nanoparticles directly as dry powders. The nanoparticles can contain various ratios of drug and polymer, and the use of any additional stabilisation materials is avoided. In this study, nanoparticles with different drug-to-polymer ratios were prepared. Particle size and morphology, crystallinity, and thermal behaviour were determined as a function of particle composition. It was found that all the nanoparticles produced, regardless of particle composition, had geometric number mean diameters of approximately 90 nm, and were spherical showing smooth surfaces. The drug was molecularly dispersed in the amorphous polymeric matrix of the nanoparticles, and drug crystallisation was not observed when the ambient temperature was below the glass transition temperature of the polymer.

SO International Journal of Pharmaceutics (Kidlington), (16 September 2003) Vol. 263, No. 1-2, pp. 69-83. print.
 ISSN: 0378-5173 (ISSN print).

AB Polymeric drug-containing nanoparticles were prepared using a novel aerosol flow reactor method. The polymeric drug-containing nanoparticles prepared consist of a poorly water soluble corticosteroid, beclomethasone dipropionate, and polymeric materials Eudragit E 100 or Eudragit L 100. The novel method used in this study allows synthesis of nanoparticles directly as dry powders. The nanoparticles can contain various ratios of drug and polymer, and the use of any additional stabilisation materials is avoided. In this study, nanoparticles with different drug-to-polymer ratios were prepared. Particle size and morphology, crystallinity, and thermal behaviour were determined as a function of particle composition. It was found that all the nanoparticles produced, regardless of particle composition, had geometric number mean diameters of approximately 90 nm, and were spherical showing smooth surfaces. The drug was molecularly dispersed in the amorphous polymeric matrix of the nanoparticles, and drug crystallisation was not observed when the ambient temperature was below the glass transition temperature of the polymer.

RN 24938-16-7 (Eudragit E 100)
 25086-15-1 (Eudragit L 100)
 5534-09-8 (beclomethasone dipropionate)

CC Biochemistry studies - Sterols and steroids 10067
 Anatomy and Histology - Gross anatomy 11102
 Pathology - Therapy 12512
 Pharmacology - General 22002
 Pharmacology - Connective tissue, bone and collagen-acting drugs 22012
 Pharmacology - Endocrine system 22016

IT Major Concepts
 Methods and Techniques; Pharmacology

IT Chemicals & Biochemicals
 Eudragit E 100; Eudragit L 100; beclomethasone dipropionate; antiinflammatory-drug; hormone-drug; corticosteroid; hormone-drug; nanoparticles; crystallinity, drug-to-polymer ratio, morphology, size, thermal behavior; polymeric nanoparticles; preparation

IT Methods & Equipment
 aerosol flow reactor method: laboratory techniques

RN 24938-16-7 (Eudragit E 100)
 25086-15-1 (Eudragit L 100)
 5534-09-8 (beclomethasone dipropionate)

L77 ANSWER 42 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN
 ACCESSION NUMBER: 2004:98944 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200400096427
 TITLE: Preparation, characterisation and evaluation of pH-responsive prednisolone microparticles.
 AUTHOR(S): Kendall, R. A. [Reprint Author]; Basit, A. W. [Reprint Author]; Murdan, S. [Reprint Author]
 CORPORATE SOURCE: Department of Pharmaceutics, The School of

10/537,467-310163-EIC SEARCH

Pharmacy, 29-39 Brunswick Square, London, WC1N 1AX,
UK

SOURCE: Journal of Pharmacy and Pharmacology, (September 2003) Vol. 55, No. Supplement,
pp. S.62. print.
Meeting Info.: Science Proceedings of the British
Pharmaceutical Conference. Harrogate, England, UK.
September 15-17, 2003.
CODEN: JPPMAB. ISSN: 0022-3573.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Feb 2004
Last Updated on STN: 18 Feb 2004

SO Journal of Pharmacy and Pharmacology, (September 2003)
Vol. 55, No. Supplement, pp. S.62. print.
Meeting Info.: Science Proceedings of the British Pharmaceutical
Conference. Harrogate, England, UK. September 15-17, 2003.
CODEN: JPPMAB. ISSN: 0022-3573.

IT Methods & Equipment
emulsification-solvent evaporation method: laboratory
techniques; microencapsulation method: laboratory techniques

RN 25086-15-1 (Eudragit L100)
25212-88-8 (Eudragit L100-55)
25086-15-1 (Eudragit S100)
50-24-8 (prednisolone)

CC General biology - Symposia, transactions and proceedings 00520
Biochemistry studies - General 10060
Biochemistry studies - Sterols and steroids 10067
Pathology - Therapy 12512
Pharmacology - General 22002

IT Major Concepts
Biochemistry and Molecular Biophysics; Methods and Techniques;
Pharmacology

IT Chemicals & Biochemicals
Eudragit L100: characterization, evaluation, pH-responsive
microparticles, preparation; Eudragit L100-55:
characterization, evaluation, pH-responsive microparticles,
preparation; Eudragit S100: characterization, evaluation,
pH-responsive microparticles, preparation; prednisolone:
pharmaceutical

IT Methods & Equipment
emulsification-solvent evaporation method: laboratory
techniques; microencapsulation method: laboratory techniques

RN 25086-15-1 (Eudragit L100)
25212-88-8 (Eudragit L100-55)
25086-15-1 (Eudragit S100)
50-24-8 (prednisolone)

L77 ANSWER 43 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson
Corporation on STN

ACCESSION NUMBER: 2004:401078 BIOSIS Full-text

DOCUMENT NUMBER: PREV20040401380

TITLE: Formulation and in-vitro release evaluation of
topical tenoxicam preparations.

AUTHOR(S): Makky, A. M. A. [Reprint Author]

CORPORATE SOURCE: Fac PharmDept Pharmaceut, Cairo Univ, Cairo, Egypt

SOURCE: Egyptian Journal of Pharmaceutical Sciences, (2002) Vol. 43, No. 1-2, pp. 1-17. print.
CODEN: EJPSEZ. ISSN: 0301-5068.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Oct 2004
Last Updated on STN: 13 Oct 2004

AB Tenoxicam ointments (1%) were prepared using oleaginous, absorption, water in oil
(W/O), oil in water (O/W) and water soluble ointment bases. Also, (0.5%) gel

formulations were prepared using the following gelling agents; eudispert hv, carbopol 934, hydroxyethylcellulose (HEC), poloxamer 407, sodium carboxymethylcellulose (NaCMC), methylcellulose 4000 (MC 4000) as well as an organogel composed of a mixture of Eudragit S 100 and propylene glycol (PG). The in-vitro release of tenoxicam from different ointments bases and gels was studied in Sorenson's phosphate buffer pH 7.4. Among the ointments, the water soluble base proved superior in release while for gels, the formula containing 25% poloxamer 407 achieved the best in-vitro drug release. The effect of certain additives and penetration enhancers, namely (5%) ethanol or Tween 80, on the release of drug from poloxamer 407 gel was studied. Both additives achieved a decrease in the release of the drug compared to the plain gel. Viscosity studies were performed to correlate the amount of tenoxicam released with the viscosity of poloxamer 407 gel bases. No correlation was found. 20% of 2-propanol hardly affected the release pattern of the drug from carbopol 934 gel while 5% dimethyl sulfoxide (DMSO) slightly retarded the release from eudispert by gel. The in-vitro release data of drug was treated kinetically. The release from ointments obeyed zero and first orders while the release from gels obeyed the diffusion mechanism. pH values of the formulae solutions were followed during the study and found suitable for topical use.

SO Egyptian Journal of Pharmaceutical Sciences, (2002) Vol.

43, No. 1-2, pp. 1-17, print.

CODEN: EJPSSZ. ISSN: 0301-5068.

IT Major Concepts

Pharmaceuticals (Pharmacology); Toxicology

IT Chemicals & Biochemicals

2-propanol; Eudragit S 100; Sorenson's phosphate buffer;
alcohol; carbopol 934; dimethyl formamide; dimethyl sulfoxide;
eudispert hv gel; fatty acids; hydroxyethylcellulose; lecithin;
methylcellulose 4000; non-ionic surfactant; oil-in-water
emulsion; phosphatidylglycerol; poloxamer 407;
polysorbate 80; propylene glycol; propylene glycol solution;
sodium carboxyme -thylcellulose; tenoxicam: analgesic-drug,
antiinflammatory-drug, immunologic-drug, ointment,
pharmacokinetics, release, topical administration, toxicity

RN 67-63-0 (2-propanol)

25086-15-1 (Eudragit S 100)

64-17-5 (alcohol)

9007-16-3 (carbopol 934)

68-12-2 (dimethyl formamide)

67-68-5 (dimethyl sulfoxide)

9004-62-0 (hydroxyethylcellulose)

106392-12-5 (poloxamer 407)

9005-65-6 (polysorbate 80)

57-55-6 (propylene glycol)

9004-32-4 (sodium carboxyme -thylcellulose)

59804-37-4 (tenoxicam)

CC Biochemistry studies - General 10060

Biochemistry studies - Lipids 10066

Pathology - Therapy 12512

Pharmacology - General 22002

Pharmacology - Drug metabolism and metabolic stimulators 22003

Pharmacology - Connective tissue, bone and collagen-acting drugs
22012

Pharmacology - Immunological processes and allergy 22018

Pharmacology - Neuropharmacology 22024

Toxicology - General and methods 22501

Toxicology - Pharmacology 22504

IT Major Concepts

Pharmaceuticals (Pharmacology); Toxicology

IT Chemicals & Biochemicals

2-propanol; Eudragit S 100; Sorenson's phosphate buffer;
alcohol; carbopol 934; dimethyl formamide; dimethyl sulfoxide;
eudispert hv gel; fatty acids; hydroxyethylcellulose; lecithin;
methylcellulose 4000; non-ionic surfactant; oil-in-water
emulsion; phosphatidylglycerol; poloxamer 407;
polysorbate 80; propylene glycol; propylene glycol solution;
sodium carboxyme -thylcellulose; tenoxicam: analgesic-drug,
antiinflammatory-drug, immunologic-drug, ointment,
pharmacokinetics, release, topical administration, toxicity

- IT Miscellaneous Descriptors
 content uniformity; diffusion mechanism; hydrophilic-lipophilic balance; oleaginous absorption; viscosity studies
- RN 67-63-0 (2-propanol)
 25086-15-1 (Eudragit S 100)
 64-17-5 (alcohol)
 9007-16-3 (carbopol 934)
 68-12-2 (dimethyl formamide)
 67-68-5 (dimethyl sulfoxide)
 9004-62-0 (hydroxyethylcellulose)
 106392-12-5 (poloxamer 407)
 9005-65-6 (polysorbate 80)
 57-55-6 (propylene glycol)
 9004-32-4 (sodium carboxymethylcellulose)
 59804-37-4 (tenoxicam)
- L77 ANSWER 44 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN
- ACCESSION NUMBER: 2001:341208 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200100341208
 TITLE: Preparation and evaluation of ketoprofen floating oral delivery system.
 AUTHOR(S): El-Kamel, A. H.; Sokar, M. S.; Al Gamal, S. S.; Naggar, V. F. [Reprint author]
 CORPORATE SOURCE: Department of Pharmaceutics, Faculty of Pharmacy, University of Alexandria, Alexandria, Egypt
 pharmacy_alex@hotmail.com
 SOURCE: International Journal of Pharmaceutics (Kidlington), (4 June, 2001) Vol. 220, No. 1-2, pp. 13-21. print.
 CODEN: IJPHDE. ISSN: 0378-5173.
- DOCUMENT TYPE: Article
 LANGUAGE: English
 ENTRY DATE: Entered STN: 18 Jul 2001
 Last Updated on STN: 19 Feb 2002
- AB A sustained release system for ketoprofen designed to increase its residence time in the stomach without contact with the mucosa was achieved through the preparation of floating microparticles by the emulsion-solvent diffusion technique. Four different ratios of Eudragit S100 (ES) with Eudragit RL (ERL) were used to form the floating microparticles. The drug retained in the floating microparticles decreased with increase in ERL content. All floating microparticle formulations showed good flow properties and packability. Scanning electron microscopy and particle size analysis revealed differences between the formulations as to their appearance and size distribution. X-ray and DSC examination showed the amorphous nature of the drug. Release rates were generally low in 0.1 N HCl especially in presence of high content of ES while in phosphate buffer pH 6.8, high amounts of ES tended to give a higher release rate. Floating ability in 0.1 N HCl, 0.1 N HCl containing 0.02% Tween 20 and simulated gastric fluid without pepsin was also tested. The formulation containing ES:ERL1:1 (FIII) exhibited high percentage of floating particles in all examined media.
- SO International Journal of Pharmaceutics (Kidlington), (4 June, 2001) Vol. 220, No. 1-2, pp. 13-21. print.
 CODEN: IJPHDE. ISSN: 0378-5173.
- AB A sustained release system for ketoprofen designed to increase its residence time in the stomach without contact with the mucosa was achieved through the preparation of floating microparticles by the emulsion-solvent diffusion technique. Four different ratios of Eudragit S100 (ES) with Eudragit RL (ERL) were used to form the floating microparticles. The drug retained in the floating microparticles decreased with increase in ERL content. All floating microparticle formulations showed good flow properties and packability. Scanning electron microscopy and particle size analysis revealed differences between the formulations as to their appearance and size distribution. X-ray and DSC examination showed the amorphous nature of the drug. Release rates were generally low in 0.1 N HCl especially in presence of high content of ES while in phosphate buffer pH 6.8, high amounts of ES tended to give a higher release rate. Floating ability in 0.1 N HCl, 0.1 N HCl containing 0.02% Tween 20 and simulated gastric fluid without pepsin was also tested. The formulation containing ES:ERL1:1 (FIII) exhibited high percentage of floating particles in all examined media.
- IT Methods & Equipment

X-ray analysis: analytical method; differential scanning calorimetry: analytical method; emulsion-solvent diffusion technique: synthetic method; scanning electron microscopy: analytical method

IT Miscellaneous Descriptors
floating microparticle: drug delivery system; gastric fluid; stomach

RN 33434-24-1 (Eudragit RL)
25086-15-1 (Eudragit S100)
22071-15-4 (ketoprofen)

CC Pharmacology - Connective tissue, bone and collagen-acting drugs
22012
Biochemistry studies - General 10060
Pathology - Therapy 12512
Pharmacology - General 22002

IT Major Concepts
Pharmaceuticals (Pharmacology)

IT Chemicals & Biochemicals
Eudragit RL; Eudragit S100; ketoprofen: antiarthritic-drug, antiinflammatory-drug, delivery

IT Methods & Equipment
X-ray analysis: analytical method; differential scanning calorimetry: analytical method; emulsion-solvent diffusion technique: synthetic method; scanning electron microscopy: analytical method

IT Miscellaneous Descriptors
floating microparticle: drug delivery system; gastric fluid; stomach

RN 33434-24-1 (Eudragit RL)
25086-15-1 (Eudragit S100)
22071-15-4 (ketoprofen)

L77 ANSWER 45 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:291420 BIOSIS Full-text
DOCUMENT NUMBER: PREV200000291420
TITLE: Extrusion-spheronization of pH-sensitive polymeric matrix pellets for possible colonic drug delivery.

AUTHOR(S): Krogars, Karin [Reprint author]; Heinamaki, Jyrki; Vesalahti, Johanna; Marvola, Martti; Antikainen, Osmo; Yliruusi, Jukko

CORPORATE SOURCE: Department of Pharmacy, Division of Pharmaceutical Technology, University of Helsinki, FIN-00014, Helsinki, Finland

SOURCE: International Journal of Pharmaceutics (Kidlington), (April 20, 2000) Vol. 199, No. 2, pp. 187-194. print.
CODEN: IJPHDE. ISSN: 0378-5173.

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Jul 2000
Last Updated on STN: 7 Jan 2002

AB The aim of this study was to investigate extrusion-spheronization pelletization for preparing pH-sensitive matrix pellets for colon-specific drug delivery. The effects of three independent variables (amounts of EudragitTM S, citric acid and spheronizing time) on pellet size, shape (roundness and aspect ratio), and drug release were studied with central composite design. The pellets contained ibuprofen as a model drug, citric acid as a pH-adjusting agent, EudragitTM S as a pH-sensitive binder and microcrystalline cellulose (MCC). The pellets were prepared with Nica extrusion-spheronizing equipment and subsequently enteric-coated using an air-suspension technique. EudragitTM S as a pH-sensitive matrix former in pellets increased the pellet size and influenced pellet roundness. In small amounts EudragitTM S increased pellet roundness but in larger amounts pellet roundness was reduced. Citric acid promoted the pelletization process resulting in a narrower area distribution. The pH-sensitive matrix pellet failed to delay the drug release. The combination of citric acid and enteric coating, however, delayed the drug release for 15 min in a pH 7.4 phosphate buffer.

SO International Journal of Pharmaceutics (Kidlington), (April 26, 2000) Vol. 199, No. 2, pp. 187-194. print.
 CODEN: IJPHDE. ISSN: 0378-5173.

AB The aim of this study was to investigate extrusion-spheronization pelletization for preparing pH-sensitive matrix pellets for colon-specific drug delivery. The effects of three independent variables (amounts of EudragitTM S, citric acid and spheronizing time) on pellet size, shape (roundness and aspect ratio), and drug release were studied with central composite design. The pellets contained ibuprofen as a model drug, citric acid as a pH-adjusting agent, EudragitTM S as a pH-sensitive binder and microcrystalline cellulose (MCC). The pellets were prepared with Nica extrusion-spheronizing equipment and subsequently enteric-coated using an air-suspension technique. EudragitTM S as a pH-sensitive matrix former in pellets increased the pellet size and influenced pellet roundness. In small amounts EudragitTM S increased pellet roundness but in larger amounts pellet roundness was reduced. Citric acid promoted the pelletization process resulting in a narrower area distribution. The pH-sensitive matrix pellet failed to delay the drug release. The combination of citric acid and enteric coating, however, delayed the drug release for 15 min in a pH 7.4 phosphate buffer.

RN 26589-39-9 (Eudragit S)
 77-92-9 (citric acid)

9065-11-6 (EUDRAGIT S)

CC Pharmacology - General 22002
 Biochemistry methods - General 10050
 Biochemistry studies - General 10060
 Digestive system - General and methods 14001

IT Major Concepts
 Digestive System (Ingestion and Assimilation); Methods and Techniques; Pharmacology

IT Parts, Structures, & Systems of Organisms
 colon: digestive system, drug delivery

IT Chemicals & Biochemicals
 Eudragit S: pH-sensitive binder; citric acid: reagent; microcrystalline cellulose: reagent

IT Methods & Equipment
 extrusion-spheronization: pharmaceutical method

RN 26589-39-9 (Eudragit S)
 77-92-9 (citric acid)
 9065-11-6 (EUDRAGIT S)

L77 ANSWER 46 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:186976 BIOSIS Full-text

DOCUMENT NUMBER: PREV200000186976

TITLE: Effect of formulation and processing variables on the characteristics of microspheres for water-soluble drugs prepared by w/o/o double emulsion solvent diffusion method.

AUTHOR(S): Lee, Jung-Hwa; Park, Tae Gwan; Choi, Hoo-Kyun
 [Reprint author]

CORPORATE SOURCE: College of Pharmacy, Chosun University, 375 Seoseok-dong, Dong-gu, 501-759, Kwangju, South Korea

SOURCE: International Journal of Pharmaceutics (Amsterdam), (Feb. 25, 2000) Vol. 196, No. 1, pp. 75-83. print.

CODEN: IJPHDE. ISSN: 0378-5173.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 11 May 2000
 Last Updated on STN: 4 Jan 2002

AB Water-soluble drugs were encapsulated within anionic acrylic resin (Eudragit(R) S100) microspheres by water in oil in oil (w/o/o) double emulsion solvent diffusion method. Dichloromethane and corn oil were chosen as primary and secondary oil phases, respectively. The presence of internal water phase was essential in forming stable emulsion droplets and it accelerated the hardening of microspheres. Tween 80 was used as a surfactant for stabilizing internal water phase and Span 80 was used for stabilizing corn oil phase. The optimum concentration of Tween 80 was 0.25% (v/v) and

that of Span 80 was above 0.02% (v/v). The temperature of continuous phase affected stability of emulsion and the morphology of microspheres. As the volume of continuous phase increased, the size of microspheres decreased. The loading efficiency was >80% except for acetaminophen, due to its lower solubility in water and higher solubility in corn oil. The release profile of the drug was pH dependent. In acidic medium, the release rate was much slower, however, the drug was released quickly at pH 7.4. Tacrine showed unexpected release profiles, probably due to ionic interaction with polymer matrix and the shell structure and the highest release rate was obtained at pH 2.0. The prepared microspheres had a sponge-like inner structure with or without central hollow core and the surface was dense with no apparent pores.

TI Effect of formulation and processing variables on the characteristics of microspheres for water-soluble drugs prepared by w/o/o double emulsion solvent diffusion method.

SO International Journal of Pharmaceutics (Amsterdam), (Feb. 25, 2000) Vol. 196, No. 1, pp. 75-83. print.

CODEN: IJPHDE. ISSN: 0378-5173.

AB Water-soluble drugs were encapsulated within anionic acrylic resin (Eudragit(R) S100) microspheres by water in oil in oil (w/o/o) double emulsion solvent diffusion method. Dichloromethane and corn oil were chosen as primary and secondary oil phases, respectively. The presence of internal water phase was essential in forming stable emulsion droplets and it accelerated the hardening of microspheres. Tween 80 was used as a surfactant for stabilizing internal water phase and Span 80 was used for stabilizing corn oil phase. The optimum concentration of Tween 80 was 0.25% (v/v) and that of Span 80 was above 0.02% (v/v). The temperature of continuous phase affected stability of emulsion and the morphology of microspheres. As the volume of continuous phase increased, the size of microspheres decreased. The loading efficiency was >80% except for acetaminophen, due to its lower solubility in water and higher solubility in corn oil. The release profile of the drug was pH dependent. In acidic medium, the release rate was much slower, however, the drug was released quickly at pH 7.4. Tacrine showed unexpected release profiles, probably due to ionic interaction with polymer matrix and the shell structure and the highest release rate was obtained at pH 2.0. The prepared microspheres had a sponge-like inner structure with or without central hollow core and the surface was dense with no apparent pores.

IT Methods & Equipment
water in oil in oil double emulsion solvent diffusion
method: synthetic method

IT Miscellaneous Descriptors
drug encapsulation; drug formulations; drug release; polymer matrix; processing variables; shell structure; tablet hardening

RN 25086-15-1 (Eudragit S100)
75-09-2 (dichloromethane)

CC Pharmacology - General 22002

Biochemistry methods - General 10050

Biochemistry studies - General 10060

IT Major Concepts
Pharmaceuticals (Pharmacology)

IT Chemicals & Biochemicals
Eudragit S100: anionic acrylic resin; corn oil;
dichloromethane; microspheres; water-soluble drugs

IT Methods & Equipment
water in oil in oil double emulsion solvent diffusion
method: synthetic method

IT Miscellaneous Descriptors
drug encapsulation; drug formulations; drug release; polymer matrix; processing variables; shell structure; tablet hardening

RN 25086-15-1 (Eudragit S100)
75-09-2 (dichloromethane)

L77 ANSWER 47 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:10888 BIOSIS Full-text

DOCUMENT NUMBER: PREV200000010888

TITLE: Physico-chemical characterization of interactions between erythromycin and various film polymers.

AUTHOR(S): Sarisuta, N. [Reprint author]; Kumpuddee, M.; Mueller, B. W.; Puttipipatkhachorn, S.

CORPORATE SOURCE: Department of Manufacturing Pharmacy, Faculty of

10/537,467-310163-EIC SEARCH

SOURCE: Pharmacy, Mahidol University, Bangkok, Thailand
International Journal of Pharmaceutics (Amsterdam),
(Sept. 20, 1999) Vol. 186, No. 2, pp.
109-118. print.
CODEN: IJPHDE. ISSN: 0378-5173.

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Dec 1999
Last Updated on STN: 31 Dec 2001

AB In this study the interactions between erythromycin and various polymers (Eudragit L100, shellac, polyvinyl acetate phthalate (PVAP), cellulose acetate phthalate (CAP), hydroxypropyl methylcellulose acetate phthalate (HPMCP), and hydroxypropyl methylcellulose (HPMC)) were investigated. The polymer films containing drugs were prepared and characterized by the use of infrared spectroscopy, powder X-ray diffraction analysis, thermal analysis, thin layer chromatography, and nuclear magnetic resonance (NMR) spectroscopy. Preliminary studies of pure drug powders recrystallized in various organic solvent systems suggested a mixture of amorphous and crystalline forms whereas those recrystallized in water and organic solvent-water mixture led to the dihydrate form. Erythromycin in drug-polymer mixtures exhibited molecular dispersions in all six polymers studied. The amine salt interaction between the carboxyl group of the acid polymers and N-atom of erythromycin was indicated by the NMR technique. The solid solution of erythromycin in all polymer films studied was physically stable under stress conditions (8degreeC/3 days and 40degreeC/3 days for six cycles).

SO International Journal of Pharmaceutics (Amsterdam), (Sept. 20, 1999) Vol. 186, No. 2, pp. 109-118. print.
CODEN: IJPHDE. ISSN: 0378-5173.

AB In this study the interactions between erythromycin and various polymers (Eudragit L100, shellac, polyvinyl acetate phthalate (PVAP), cellulose acetate phthalate (CAP), hydroxypropyl methylcellulose acetate phthalate (HPMCP), and hydroxypropyl methylcellulose (HPMC)) were investigated. The polymer films containing drugs were prepared and characterized by the use of infrared spectroscopy, powder X-ray diffraction analysis, thermal analysis, thin layer chromatography, and nuclear magnetic resonance (NMR) spectroscopy. Preliminary studies of pure drug powders recrystallized in various organic solvent systems suggested a mixture of amorphous and crystalline forms whereas those recrystallized in water and organic solvent-water mixture led to the dihydrate form. Erythromycin in drug-polymer mixtures exhibited molecular dispersions in all six polymers studied. The amine salt interaction between the carboxyl group of the acid polymers and N-atom of erythromycin was indicated by the NMR technique. The solid solution of erythromycin in all polymer films studied was physically stable under stress conditions (8degreeC/3 days and 40degreeC/3 days for six cycles).

RN 25086-15-1 (Eudragit L100)
9004-38-0 (cellulose acetate phthalate)
114-07-8 (erythromycin)
9004-65-3 (hydroxypropyl methylcellulose)

CC Pharmacology - General 22002
Biochemistry studies - General 10060

IT Major Concepts
 Pharmaceuticals (Pharmacology)

IT Chemicals & Biochemicals
 Eudragit L100; cellulose acetate phthalate; erythromycin;
 hydroxypropyl methylcellulose; hydroxypropyl methylcellulose
 acetate phthalate; polyvinyl acetate phthalate; shellac

IT Miscellaneous Descriptors
 drug-polymer interactions

RN 25086-15-1 (Eudragit L100)
9004-38-0 (cellulose acetate phthalate)
114-07-8 (erythromycin)
9004-65-3 (hydroxypropyl methylcellulose)

L77 ANSWER 48 OF 48 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:33500 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900033500
TITLE: Design of a new multiparticulate system for potential site-specific and controlled drug

AUTHOR(S): Rodriguez, Marta; Vila-Jato, Jose L.; Torres, Dolores [Reprint author]

CORPORATE SOURCE: Dep. Pharmaceutical Technology, Faculty Pharmacy, Univ. Santiago Compostela, 15706-Santiago, Compostela, Spain

SOURCE: Journal of Controlled Release, (Oct. 30, 1998) Vol. 55, No. 1, pp. 67-77. print.

CODEN: JCREEC. ISSN: 0168-3659.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Feb 1999
Last Updated on STN: 3 Feb 1999

AB A multiparticulate dosage form consisting of a hydrophobic core coated with a pH-dependent polymer is proposed for colonic specific delivery of drugs. Different approaches for colon-specific drug delivery have been studied over the last decade, including prodrugs, polymeric coating using pH-sensitive or bacterial degradable polymers and matrices. In this work, we present a new multiparticulate system to deliver active molecules to the colonic region, which combines pH-dependent and controlled drug release properties. This system was constituted by drug loaded cellulose acetate butyrate (CAB) microspheres coated by an enteric polymer (Eudragit S). Both, CAB cores and pH-sensitive microcapsules, were prepared by the emulsion-solvent evaporation technique in an oily phase. Ondansetron (OS) and budesonide (BDS), two interesting drugs with a potentially new application for the local treatment of intestinal disorders, were efficiently microencapsulated in CAB microspheres at different polymer concentrations (6 and 8%). These hydrophobic cores (about 60 and 110 μ m in size, respectively) were then microencapsulated with Eudragit S, resulting in multinucleated structures, except in the case of BDS-CAB microspheres prepared at 8% CAB concentration, in which more mononucleated microcapsules were obtained. The in vitro drug release studies of pH-sensitive microcapsules containing the hydrophobic cores showed that no drug was released below pH 7. After that, CAB microspheres efficiently controlled the release of BDS, the release behavior being affected by the different polymer concentration used in their preparation. However, OS-CAB microspheres did not maintain their controlled-release properties once the enteric polymer dissolved. The extraction of the drug by the Eudragit solvent during the second microencapsulation process was in this case the cause for the failure of the controlling release mechanism.

SO Journal of Controlled Release, (Oct. 30, 1998) Vol. 55, No. 1, pp. 67-77. print.
CODEN: JCREEC. ISSN: 0168-3659.

AB A multiparticulate dosage form consisting of a hydrophobic core coated with a pH-dependent polymer is proposed for colonic specific delivery of drugs. Different approaches for colon-specific drug delivery have been studied over the last decade, including prodrugs, polymeric coating using pH-sensitive or bacterial degradable polymers and matrices. In this work, we present a new multiparticulate system to deliver active molecules to the colonic region, which combines pH-dependent and controlled drug release properties. This system was constituted by drug loaded cellulose acetate butyrate (CAB) microspheres coated by an enteric polymer (Eudragit S). Both, CAB cores and pH-sensitive microcapsules, were prepared by the emulsion-solvent evaporation technique in an oily phase. Ondansetron (OS) and budesonide (BDS), two interesting drugs with a potentially new application for the local treatment of intestinal disorders, were efficiently microencapsulated in CAB microspheres at different polymer concentrations (6 and 8%). These hydrophobic cores (about 60 and 110 μ m in size, respectively) were then microencapsulated with Eudragit S, resulting in multinucleated structures, except in the case of BDS-CAB microspheres prepared at 8% CAB concentration, in which more mononucleated microcapsules were obtained. The in vitro drug release studies of pH-sensitive microcapsules containing the hydrophobic cores showed that no drug was released below pH 7. After that, CAB microspheres efficiently controlled the release of BDS, the release behavior being affected by the different polymer concentration used in their preparation. However, OS-CAB microspheres did not maintain their controlled-release properties once the enteric polymer dissolved. The extraction of the drug by the Eudragit solvent during the second microencapsulation process was in this case the cause for the failure of the controlling release mechanism.

RN 51333-22-3 (budesonide)
9004-36-8 (cellulose acetate butyrate)
99614-02-5 (ondansetron)

26589-39-9 (Eudragit S)
9065-11-6D (EUDRAGIT S)
CC Pharmacology - General 22002
Biochemistry studies - General 10060
Digestive system - General and methods 14001
IT Major Concepts
 Digestive System; Pharmacology
IT Parts, Structures, & Systems of Organisms
 colon: digestive system
IT Chemicals & Biochemicals
 budesonide: gastrointestinal-drug, release; cellulose acetate
 butyrate: microspheres; ondansetron: gastrointestinal-drug,
 release; Eudragit S: enteric polymer
IT Miscellaneous Descriptors
 controlled drug delivery; multiparticulate dosage form: drug
 delivery system; pH effect
RN 51333-22-3 (budesonide)
9004-36-8 (cellulose acetate butyrate)
99614-02-5 (ondansetron)
26589-39-9 (Eudragit S)
9065-11-6D (EUDRAGIT S)

FULL SEARCH HISTORY

=> d his nofile

(FILE 'HOME' ENTERED AT 13:58:04 ON 01 OCT 2009)

FILE 'HCAPLUS' ENTERED AT 13:58:10 ON 01 OCT 2009
E US20060116290/PN

L1 1 SEA SPE=ON ABB=ON PLU=ON US20060116290/PN
D ALL
SEL RN

FILE 'REGISTRY' ENTERED AT 13:59:44 ON 01 OCT 2009
L2 24 SEA SPE=ON ABB=ON PLU=ON (117428-22-5/BI OR
131860-33-8/BI OR 153719-23-4/BI OR 155569-91-8/BI OR
1897-45-6/BI OR 478813-84-2/BI OR 478813-85-3/BI OR
478813-86-4/BI OR 478813-89-7/BI OR 478813-93-3/BI OR
478813-94-4/BI OR 478813-97-7/BI OR 478813-99-9/BI OR
478932-53-5/BI OR 709672-75-3/BI OR 709672-76-4/BI OR
709672-77-5/BI OR 709672-78-6/BI OR 709673-62-1/BI OR
709673-65-4/BI OR 709673-68-7/BI OR 709673-70-1/BI OR
709673-72-3/BI OR 71751-41-2/BI)
D SCA

FILE 'STNGUIDE' ENTERED AT 14:00:07 ON 01 OCT 2009

FILE 'REGISTRY' ENTERED AT 14:05:20 ON 01 OCT 2009
L3 0 SEA SPE=ON ABB=ON PLU=ON L2 AND SI/ELS

FILE 'LREGISTRY' ENTERED AT 14:06:54 ON 01 OCT 2009
L4 STR

FILE 'REGISTRY' ENTERED AT 14:19:02 ON 01 OCT 2009
L5 50 SEA SSS SAM L4

FILE 'LREGISTRY' ENTERED AT 14:20:23 ON 01 OCT 2009
L6 STR

FILE 'REGISTRY' ENTERED AT 14:32:12 ON 01 OCT 2009
L7 50 SEA SSS SAM L6
L8 SCR 2043
L9 50 SEA SSS SAM L6 AND L8
D QUE STAT L5
L10 50 SEA SSS SAM L4 AND L8
L11 92835 SEA SSS FUL L4 AND L8
SAV TEMP L11 KAU467REG/A
L12 50 SEA SUB=L11 SSS SAM L6
L13 17 SEA SPE=ON ABB=ON PLU=ON L2 AND L11
L14 40884 SEA SUB=L11 SSS FUL L6
SAV TEMP L14 KAU467REGA/A
L15 10 SEA SPE=ON ABB=ON PLU=ON L2 AND L14

FILE 'LREGISTRY' ENTERED AT 14:38:56 ON 01 OCT 2009
L16 STR

FILE 'REGISTRY' ENTERED AT 14:58:51 ON 01 OCT 2009
L17 22 SEA SUB=L14 SSS SAM L16
L18 588 SEA SUB=L14 SSS FUL L16
SAV TEMP L18 KAU467REGB/A
L19 5 SEA SPE=ON ABB=ON PLU=ON L2 AND L18
D SCA
D QUE STAT

FILE 'LREGISTRY' ENTERED AT 15:01:52 ON 01 OCT 2009
L20 STR
L21 STR L20

D QUE L6
 D QUE L5
 D QUE L16
 D QUE L20
 D QUE L21
 L22 STR L21
 L23 STR L16

FILE 'REGISTRY' ENTERED AT 15:18:26 ON 01 OCT 2009
 L24 50 SEA SUB=L14 SSS SAM L23
 L25 37140 SEA SUB=L14 SSS FUL L23
 D QUE STAT
 L26 7 SEA SPE=ON ABB=ON PLU=ON L25 AND L2
 SAV TEMP L25 KAU467REGCC/A
 L27 0 SEA SUB=L11 SSS SAM L20 AND L21 AND L22
 D QUE STAT
 D QUE STAT
 L28 0 SEA SUB=L11 SSS FUL L20 AND L21 AND L22
 D QUE STAT
 L29 11 SEA SUB=L11 SSS SAM L20 AND L22
 L30 199 SEA SUB=L11 SSS FUL L20 AND L22
 SAV TEMP L30 KAU467REGD/A
 L31 5 SEA SPE=ON ABB=ON PLU=ON L2 AND L30
 D SCA
 D QUE L22
 D QUE L21

FILE 'STNNGUIDE' ENTERED AT 17:04:38 ON 01 OCT 2009

FILE 'REGISTRY' ENTERED AT 17:11:18 ON 01 OCT 2009
 D L33 FIDE
 D QUE STAT L30
 D QUE L21
 D QUE STAT L30
 D QUE L21
 L32 0 SEA SUB=L30 SSS SAM L21

FILE 'LREGISTRY' ENTERED AT 17:22:08 ON 01 OCT 2009
 L33 STR L21

FILE 'REGISTRY' ENTERED AT 17:23:42 ON 01 OCT 2009
 L34 0 SEA SUB=L30 SSS SAM L33
 L35 0 SEA SUB=L11 SSS SAM L20 AND L22 AND L33
 L36 2 SEA SUB=L11 SSS SAM L21
 D SCA
 L37 30 SEA SUB=L11 SSS FUL L21
 SAV TEMP L37 KAU467REGE/A
 L38 0 SEA SPE=ON ABB=ON PLU=ON L37 AND L30
 L39 1 SEA SPE=ON ABB=ON PLU=ON L2 AND L37
 D SCA
 L40 11 SEA SPE=ON ABB=ON PLU=ON L37 AND L25
 D SCA

FILE 'HCAPLUS' ENTERED AT 17:27:30 ON 01 OCT 2009
 D SCA L1
 L41 2 SEA SPE=ON ABB=ON PLU=ON L39
 D SCA
 L42 3 SEA SPE=ON ABB=ON PLU=ON L40
 L43 64 SEA SPE=ON ABB=ON PLU=ON L37
 D L1 PRAI
 L44 64 SEA SPE=ON ABB=ON PLU=ON (L41 OR L42 OR L43)
 L45 312637 SEA SPE=ON ABB=ON PLU=ON AGROCHEM?/SC,SX
 L46 2 SEA SPE=ON ABB=ON PLU=ON L43 AND L45
 L47 2 SEA SPE=ON ABB=ON PLU=ON L31
 L48 113 SEA SPE=ON ABB=ON PLU=ON L30
 L49 2 SEA SPE=ON ABB=ON PLU=ON L26
 L50 37641 SEA SPE=ON ABB=ON PLU=ON L25

10/537,467-310163-EIC SEARCH

L51 4 SEA SPE=ON ABB=ON PLU=ON L48 AND L45
L52 284 SEA SPE=ON ABB=ON PLU=ON L50 AND L45
D QUE
L53 2 SEA SPE=ON ABB=ON PLU=ON L49 AND L45
L54 4 SEA SPE=ON ABB=ON PLU=ON (L46 OR L47) OR L51 OR L53

L55 QUE SPE=ON ABB=ON PLU=ON SUSPEN? OR DISPERS? OR
COLLOID? OR EMULS? OR MICROEMULS? OR SLURR?
L56 121 SEA SPE=ON ABB=ON PLU=ON L52 AND L55
L57 QUE SPE=ON ABB=ON PLU=ON AQUEOUS OR (WATER OR
H₂O) (2A) SOLUBLE
L58 49 SEA SPE=ON ABB=ON PLU=ON L56 AND L57
D QUE
L59 52 SEA SPE=ON ABB=ON PLU=ON L54 OR L58
L60 QUE SPE=ON ABB=ON PLU=ON PY=<2003 NOT P/DT
L61 1 SEA SPE=ON ABB=ON PLU=ON L59 AND L60
L62 QUE SPE=ON ABB=ON PLU=ON (PY=<2003 OR PRY=<2003 OR
AY=<2003 OR MY=<2003 OR REVIEW/DT) AND P/DT
L63 34 SEA SPE=ON ABB=ON PLU=ON L58 AND L62
L64 35 SEA SPE=ON ABB=ON PLU=ON L63 OR L61
SAV TEMP L64 KAU467HCP/A
L65 1 SEA SPE=ON ABB=ON PLU=ON L64 AND L54
D SCA
L66 4 SEA SPE=ON ABB=ON PLU=ON L65 OR L54
D SCA
L67 34 SEA SPE=ON ABB=ON PLU=ON L64 NOT L66
SAV TEMP L64 KAU467HCPA/A
SAV TEMP L67 KAU467HCPB/A

FILE 'REGISTRY' ENTERED AT 17:43:16 ON 01 OCT 2009
L68 229 SEA SPE=ON ABB=ON PLU=ON L39 OR L40 OR L37 OR L31
OR L30
L69 37267 SEA SPE=ON ABB=ON PLU=ON L68 OR L25 OR L15
L70 18 SEA SPE=ON ABB=ON PLU=ON L69 AND (AGRICOLA/LC OR
BIOSIS/LC OR EMBASE/LC)

FILE 'AGRICOLA, BIOSIS, EMBASE' ENTERED AT 17:46:29 ON 01 OCT 2009
L71 161 SEA SPE=ON ABB=ON PLU=ON L70
L72 24 SEA SPE=ON ABB=ON PLU=ON L71 AND L55
L73 10 SEA SPE=ON ABB=ON PLU=ON L72 AND L60
L74 0 SEA SPE=ON ABB=ON PLU=ON L72 AND L62
L75 10 SEA SPE=ON ABB=ON PLU=ON L73 OR L74
SAV TEMP L75 KAU467MULT/A

FILE 'HCAPLUS' ENTERED AT 17:48:56 ON 01 OCT 2009
L76 38 SEA SPE=ON ABB=ON PLU=ON L66 OR L67
D QUE L76
D QUE L75
D QUE L75

FILE 'HCAPLUS, BIOSIS' ENTERED AT 17:50:21 ON 01 OCT 2009
L77 48 DUP REM L76 L75 (0 DUPLICATES REMOVED)
ANSWERS '1-38' FROM FILE HCAPLUS
ANSWERS '39-48' FROM FILE BIOSIS
D L77 1-38 IBIB ED ABS HITSTR HITIND
D L77 39-48 IBIB AB HIT IND